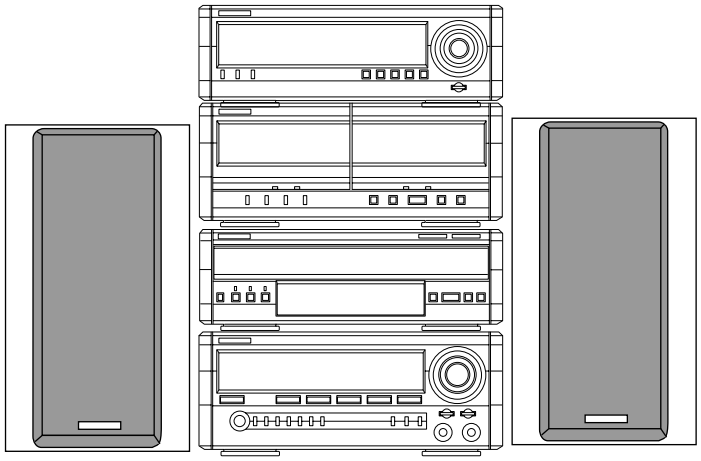
aiwa SERVICE

XR-H2000 EZ,K



SERVICE MANUAL

COMPACT DISC STEREO SYSTEM

BASIC TAPE MECHANISM : 2ZM-3MK2 PR4NM
BASIC CD MECHANISM : AZG-1 ZD3RNDM

SYSTEM	STEREO RECEIVER	CD PLAYER	CASSETTE DECK	GRAPHIC EQUALISER	SPEAKERS	REMOTE CONTROL
XR-H2000	MX-NH2000	DX-NH2000	FX-NH2000	GE-NH2000	SX-NDPH2100	RC-ZAS04

• If requiring information about the CD mechanism, see Service Manual of AZG-1 ZD3RNDM, (S/M Code No. 09-001-335-3N8).

aiwa

S/M Code No. 09-006-427-6R2

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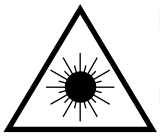
PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

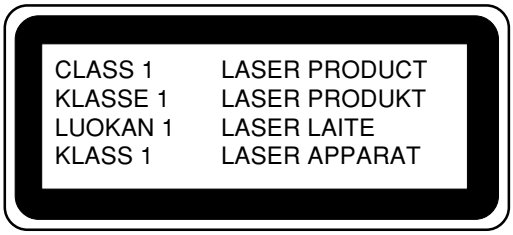
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

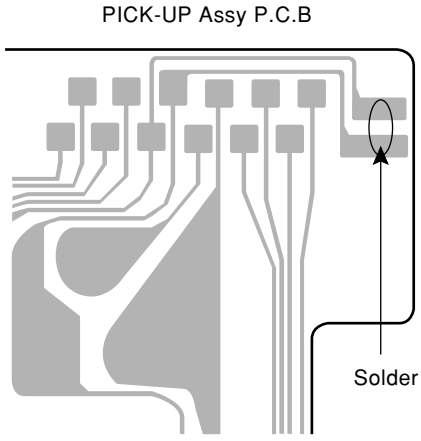


Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.



SPECIFICATIONS

<STEREO RECEIVER MX-NH2000>

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<MW Tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW Tuner section>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated: 65 W + 65 W (1 kHZ, T.H.D.1%, 6 ohms/DIN 45500) Reference: 80 W + 80 W (1 kHZ, T.H.D.10%, 6 ohms/DIN 45324) EZ: DIN MUSIC POWER: 125 W + 125 W
Total harmonic distortion	0.1 % (8 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 310 mV (adjustable) MD: 310 mV (adjustable) MIC 1, MIC 2: 1.2 mV (10 kohms)
Outputs	LINE OUT: 175 mV SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

<General>

Power requirements	230 V AC, 50 Hz
Power consumption	130 W
Power consumption in standby mode	If the power-economizing mode is ECO OFF: 30 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
Dimensions of main unit (W x H x D)	284 x 122 x 337 mm
Weight of main unit	6.4 kg

<CD PLAYER DX-NH2000>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
Dimensions of main unit (W x H x D)	284 x 101 x 315 mm
Weight of main unit	2.3 kg

<CASSETTE DECK FX-NH2000>

Track format	4 tracks, 2 channels stereo
Frequency response	Type II (high/CrO_2) tape: 50 Hz – 16000 Hz Type I (normal) tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, Type II tape peak level)
Recording system	AC bias, AC erase
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback head x 1,erase head x 1
Dimensions of main unit (W x H x D)	284 x 122 x 315 mm
Weight of main unit	2.0 kg

<GRAPHIC EQUALIZER GE-NH2000>

Dimensions of main unit (W x H x D)	260x 101 x 328 mm
Weight	1.8 kg

<SPEAKER SYSTEM SX–NDPH2100>

Cabinet type	3 way (magnetic shielded type)
Speakers	Woofer: 140 mm cone type x 2 Tweeter: 60 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W x H x D)	250 x 443 x 250 mm
Weight	7.0 kg

- Design and specifications are subject to change without notice.
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  Under license from BBE Sound, Inc.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-SP1-905-010		IB,K(E)M<K>
1	8A-SP1-906-010		IB,EZ(9L)M<EZ>
2	8Z-NF5-702-010		RC UNIT,ZAS04
3	87-006-225-010		AM LOOP ANT NC2
4	87-A90-118-010		ANT,WIRE FM (Z)

MODEL NO.

MX-NH2000

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-SP1-601-010		C-IC,UPD780228GF-065-3BA
	87-A20-914-010		IC,SPS-442-1-F
	87-A21-202-040		C-IC,M62445AFP
	87-A20-804-040		C-IC,NJM2152M
	87-A21-419-040		IC,NJM4558MD-TE2
	87-A20-869-040		C-IC,M62449FP
	87-A20-440-040		C-IC,BU1920FS
	87-A21-018-040		C-IC,M65849BFP631D
	87-A20-913-010		IC,LA1837NL
	87-070-127-110		IC,LC72131D
TRANSISTOR			
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-245-080		TR,DTC114ES
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-083-080		TR,CSD1489B
	87-A30-075-080		C-TR,2SA1235F
	87-026-609-080		TR,KTA1266GR
	87-A30-087-080		C-FET,2SK2158
	87-A30-257-080		C-TR,2SD1306E
	87-A30-086-080		C-TR,CSD1306E
	87-A30-268-040		C-TR,2SA1514K(S)
	87-A30-190-080		TR,CC5551
	87-A30-137-010		TR,2SD2494
	87-A30-138-010		TR,2SB1625
	87-A30-071-080		C-TR,RT1N 144C
	87-A30-106-070		C-TR,CMBT5551
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-074-080		C-TR,RT1P 141C
	87-026-263-080		C-TR,RN1410
	89-112-965-080		TR,2SA1296 GR
	87-026-226-080		CHIP-TR,DTA143EK
	87-A30-196-080		TR,2SC4115SRS
	87-A30-186-010		FET,2SK3053
DIODE			
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-547-090		DIODE,D5SBA20
	87-017-447-010		DIODE,GBU4DL-6419
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-269-080		C-DIODE,MC2836
	87-A40-270-080		C-DIODE,MC2838
	87-A40-435-080		ZENER,MTZJ30D
	87-A40-500-080		ZENER,MTZJ30B
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-004-080		ZENER,MTZJ16A
	87-070-345-080		DIODE,IN4148
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-370-090		DIODE,RK46-P20
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-488-080		DIODE,1SS244
	87-A40-438-080		ZENER,MTZJ4.7A
	87-A40-002-080		ZENER,MTZJ5.1C
	87-017-931-080		ZENER,MTZJ5.6B
	87-017-148-080		ZENER,HZS6A1L
	87-A40-270-080		C-DIODE,MC2838
MAIN C.B			
C101	87-010-917-000		CAP,E 3300-50 M SMG
C102	87-010-917-000		CAP,E 3300-50 M SMG
C103	87-016-658-000		CAP,E 4700-35 M SMG
C104	87-016-658-000		CAP,E 4700-35 M SMG
C105	87-012-368-080		C-CAP,S 0.1-50 F
C106	87-012-368-080		C-CAP,S 0.1-50 F
C107	87-012-368-080		C-CAP,S 0.1-50 F
C108	87-012-368-080		C-CAP,S 0.1-50 F
C109	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-196-080		CHIP CAPACITOR,0.1-25
C112	87-010-196-080		CHIP CAPACITOR,0.1-25
C113	87-010-247-080		CAP, ELECT 100-50V
C114	87-010-385-080		CAP, ELECT 220-25V
C115	87-010-385-080		CAP, ELECT 220-25V
C116	87-010-247-080		CAP, ELECT 100-50V
C117	87-010-430-080		CAP, ELECT 100-63
C118	87-010-263-080		CAP, ELECT 100-10V
C119	87-010-260-080		CAP, ELECT 47-25V
C120	87-010-403-080		CAP, ELECT 3.3-50V
C121	87-010-174-080		C-CAP,S 470P-50
C122	87-010-403-080		CAP, ELECT 3.3-50V
C123	87-010-247-080		CAP, ELECT 100-50V
C124	87-010-112-080		CAP, ELECT 100-16V
C125	87-010-235-080		CAP,E 470-16 SME
C201	87-010-322-080		C-CAP,S 100P-50 CH
C202	87-010-322-080		C-CAP,S 100P-50 CH
C209	87-010-405-080		CAP, ELECT 10-50V
C210	87-010-405-080		CAP, ELECT 10-50V
C211	87-010-183-080		C-CAP,S 2700P-50 B
C212	87-010-183-080		C-CAP,S 2700P-50 B
C213	87-010-187-080		CAP CHIP S5600P
C214	87-010-187-080		CAP CHIP S5600P
C215	87-010-405-080		CAP, ELECT 10-50V
C216	87-010-405-080		CAP, ELECT 10-50V
C217	87-010-408-080		CAP, ELECT 47-50V
C218	87-010-408-080		CAP, ELECT 47-50V
C219	87-A10-516-080		C-CAP,S 100P-200 J CH
C220	87-A10-516-080		C-CAP,S 100P-200 J CH
C221	87-016-462-080		C-CAP,S 1-16 F
C222	87-016-462-080		C-CAP,S 1-16 F
C223	87-010-405-080		CAP, ELECT 10-50V
C226	87-010-405-080		CAP, ELECT 10-50V
C227	87-010-407-080		CAP, ELECT 33-50V
C229	87-010-407-080		CAP, ELECT 33-50V
C230	87-010-408-080		CAP, ELECT 47-50V
C231	87-010-192-080		C-CAP,S 0.022-50 F
C232	87-010-192-080		C-CAP,S 0.022-50 F
C233	87-010-401-080		CAP, ELECT 1-50V
C234	87-010-401-080		CAP, ELECT 1-50V
C235	87-010-196-080		CHIP CAPACITOR,0.1-25
C290	87-010-188-080		CAP,CHIP 6800P
C503	87-010-180-080		C-CER 1500P
C504	87-010-180-080		C-CER 1500P
C511	87-010-405-080		CAP, ELECT 10-50V
C512	87-010-405-080		CAP, ELECT 10-50V
C513	87-010-404-080		CAP, ELECT 4.7-50V
C514	87-010-404-080		CAP, ELECT 4.7-50V
C519	87-012-142-080		CAP, S 0.33-16
C520	87-016-669-080		C-CAP,S 0.1-25 K B
C521	87-016-083-080		C-CAP,S 0.15-16 RK
C522	87-010-183-080		C-CAP,S 2700P-50 B
C523	87-016-669-080		C-CAP,S 0.1-25 K B
C525	87-010-404-080		CAP, ELECT 4.7-50V
C526	87-010-404-080		CAP, ELECT 4.7-50V
C531	87-010-405-080		CAP, ELECT 10-50V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C532	87-010-263-080		CAP, ELECT 100-10V
C533	87-010-263-080		CAP, ELECT 100-10V
C534	87-010-406-080		CAP, ELECT 22-50
C535	87-010-195-080		C-CAP,S 0.068-25 F
C536	87-012-142-080		CAP, S 0.33-16
C537	87-010-196-080		CHIP CAPACITOR,0.1-25
C538	87-010-404-080		CAP, ELECT 4.7-50V
C539	87-010-404-080		CAP, ELECT 4.7-50V
C540	87-010-314-080		C-CAP,S 22P-50J CH
C541	87-010-314-080		C-CAP,S 22P-50J CH
C542	87-010-314-080		C-CAP,S 22P-50J CH
C545	87-010-196-080		CHIP CAPACITOR,0.1-25
C547	87-010-401-080		CAP, ELECT 1-50V
C548	87-010-401-080		CAP, ELECT 1-50V
C601	87-010-401-080		CAP, ELECT 1-50V
C602	87-010-401-080		CAP, ELECT 1-50V
C603	87-010-182-080		C-CAP,S 2200P-50 B
C604	87-010-182-080		C-CAP,S 2200P-50 B
C605	87-010-369-080		C-CAP,S 0.033-25 K B
C606	87-010-369-080		C-CAP,S 0.033-25 K B
C607	87-010-405-080		CAP, ELECT 10-50V
C608	87-010-405-080		CAP, ELECT 10-50V
C609	87-010-374-080		CAP, ELECT 47-10V
C610	87-010-374-080		CAP, ELECT 47-10V
C611	87-010-405-080		CAP, ELECT 10-50V
C612	87-010-112-080		CAP, ELECT 100-16V
C613	87-010-173-080		C-CAP,S 390P-50 SL
C614	87-010-173-080		C-CAP,S 390P-50 SL
C668	87-010-190-080		S CHIP F 0.01
C701	87-010-402-080		CAP, ELECT 2.2-50V
C702	87-010-402-080		CAP, ELECT 2.2-50V
C703	87-016-669-080		C-CAP,S 0.1-25 K B
C704	87-016-669-080		C-CAP,S 0.1-25 K B
C705	87-016-460-080		C-CAP,S 0.22-16 B
C706	87-016-460-080		C-CAP,S 0.22-16 B
C707	87-012-365-080		C-CAP,S 0.027-25VBK
C708	87-012-365-080		C-CAP,S 0.027-25VBK
C709	87-010-956-080		CHIP-CAP,S 0.068-25B
C710	87-010-956-080		CHIP-CAP,S 0.068-25B
C711	87-010-197-080		CAP, CHIP 0.01 DM
C712	87-010-197-080		CAP, CHIP 0.01 DM
C713	87-010-198-080		CAP, CHIP 0.022
C714	87-010-198-080		CAP, CHIP 0.022
C715	87-010-183-080		C-CAP,S 2700P-50 B
C716	87-010-183-080		C-CAP,S 2700P-50 B
C717	87-010-188-080		CAP,CHIP 6800P
C718	87-010-188-080		CAP,CHIP 6800P
C719	87-010-178-080		CHIP CAP 1000P
C720	87-010-178-080		CHIP CAP 1000P
C721	87-010-182-080		C-CAP,S 2200P-50 B
C722	87-010-182-080		C-CAP,S 2200P-50 B
C730	87-010-404-080		CAP, ELECT 4.7-50V
C731	87-010-112-080		CAP, ELECT 100-16V
C735	87-010-314-080		C-CAP,S 22P-50 CH
C736	87-010-314-080		C-CAP,S 22P-50 CH
C737	87-010-314-080		C-CAP,S 22P-50 CH
C738	87-010-196-080		CHIP CAPACITOR,0.1-25
C901	87-010-182-080		C-CAP,S 2200P-50 B
C902	87-010-182-080		C-CAP,S 2200P-50 B
C903	87-010-196-080		CHIP CAPACITOR,0.1-25
C904	87-010-196-080		CHIP CAPACITOR,0.1-25
C905	87-010-196-080		CHIP CAPACITOR,0.1-25
C906	87-010-196-080		CHIP CAPACITOR,0.1-25
C907	87-010-190-080		S CHIP F 0.01
C908	87-010-190-080		S CHIP F 0.01
C909	87-012-368-080		C-CAP,S 0.1-50 F
C910	87-012-368-080		C-CAP,S 0.1-50 F
C911	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C913	87-010-196-080		CHIP CAPACITOR,0.1-25
C920	87-012-157-080		C-CAP,S 330P-50 CH
C921	87-012-157-080		C-CAP,S 330P-50 CH
C922	87-012-157-080		C-CAP,S 330P-50 CH
C923	87-012-157-080		C-CAP,S 330P-50 CH
C924	87-012-157-080		C-CAP,S 330P-50 CH
C925	87-012-157-080		C-CAP,S 330P-50 CH
C951	87-010-401-080		CAP, ELECT 1-50V
C952	87-010-263-080		CAP, ELECT 100-10V
C953	87-010-380-080		CAP, ELECT 47-16V
CN121	87-049-919-010		CONN,3P EH V WHT
CN123	87-049-469-010		CONN,4P V
CN601	87-099-196-010		CONN,8P 6216 V
CN621	87-A60-063-010		CONN,04P V 9604S-04C
CN901	87-099-719-010		CONN,30P TYK-B(X)
CN902	87-009-877-010		CONN,9P FG
CN903	87-009-063-010		CONNECTOR 11P
CN906	87-A60-058-010		CONN,10P V 9604S-10C
CN907	87-A60-056-010		CONN,12P V 9604S-12C
CN951	87-A60-109-010		CONN,2P V S2M-2W
FB501	87-003-223-010		FERRITE BEAD BLO2RN2
FB503	87-008-372-080		FILTER, EMI BLO1 RN1
FB504	87-008-372-080		FILTER, EMI BLO1 RN1
FB901	87-008-372-080		FILTER, EMI BLO1 RN1
FB902	87-008-372-080		FILTER, EMI BLO1 RN1
FB903	87-008-372-080		FILTER, EMI BLO1 RN1
J901	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC
J902	87-A60-617-010		TERMINAL,SP 4P (MSC)
J903	87-A60-653-010		JACK,PIN 4P BLK/BLK
J905	87-A60-658-010		JACK,PIN 6P WHITE/RED
JW179	87-008-372-080		FILTER, EMI BL OIRNI
L601	87-005-372-080		COIL S 1MHM
L602	87-005-372-080		COIL S 1MHM
L901	87-003-383-010		COIL,1UH-S
L902	87-003-383-010		COIL,1UH-S
⚠ PR201	87-002-330-080		ICP-N5
R237	87-A00-262-080		RES,M/F 0.15-2W J
R238	87-A00-262-080		RES,M/F 0.15-2W J
R239	87-A00-262-080		RES,M/F 0.15-2W J
R240	87-A00-262-080		RES,M/F 0.15-2W J
R909	87-A00-440-050		RES,220-1/2W J RP
R910	87-A00-440-050		RES,220-1/2W J RP
R911	87-A00-440-050		RES,220-1/2W J RP
R912	87-A00-440-050		RES,220-1/2W J RP
R913	87-A00-527-080		RES,10-1/4W J NAT
R914	87-A00-527-080		RES,10-1/4W J NAT
R915	87-A00-527-080		RES,10-1/4W J NAT
R916	87-A00-527-080		RES,10-1/4W J NAT
RY901	87-A90-713-010		RELAY,12V DQ12D1-OS(M)
TH201	87-A91-081-080		C-THMS,100K-K 20P
TH202	87-A91-081-080		C-THMS,100K-K 20P
W101	8Z-SP1-627-010		F-CABLE,7P 2.5 280MM
W601	88-908-281-110		FF-CABLE,8P 1.25 280MM
W906	88-910-071-110		FF-CABLE,10P 1.25 70MM
W907	88-912-121-110		FF-CABLE,12P 1.25 120
WH102	87-A90-460-010		HLDR,WIRE 2.5-7P

FRONT C.B

C101	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-192-080		C-CAP,S 0.022-50 F
C202	87-010-498-040		CAP,E 10-16 5L
C203	87-016-081-080		C-CAP,S 0.1-16 RK
C204	87-010-981-040		CAP,E 22-35 5L SRE
C205	87-010-194-080		CAP, CHIP 0.047
C206	87-010-405-040		CAP,E 10-50
C207	87-010-194-080		CAP, CHIP 0.047
C208	87-A10-189-040		CAP,E 220-10
C209	87-010-071-040		CAP,E 1-50 M 5L SRE
C211	87-012-140-080		CAP 470P
C220	87-016-669-080		C-CAP,S 0.1-25 K B
C221	87-016-669-080		C-CAP,S 0.1-25 K B

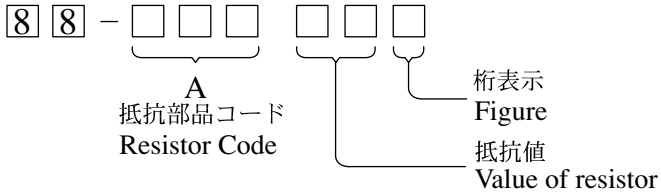
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C222	87-010-401-040		CAP,E 1-50 SME
C223	87-010-196-080		C-CAP,S 0.1-25 ZF
C224	87-010-196-080		C-CAP,S 0.1-25 ZF
C241	87-010-178-080		CHIP CAP 1000P
C242	87-010-316-080		C-CAP,S 33P-50 CH
C243	87-010-313-080		CAP, CHIP 18P
C244	87-010-316-080		C-CAP,S 33P-50 CH
C247	87-016-669-080		C-CAP,S 0.1-25 K B
C248	87-010-192-080		C-CAP,S 0.022-50 F
C251	87-010-197-080		CAP, CHIP 0.01 DM
C252	87-010-197-080		CAP, CHIP 0.01 DM
C253	87-A10-189-040		CAP,E 220-10
C254	87-010-197-080		CAP, CHIP 0.01 DM
C255	87-018-134-080		CAPACITOR,TC-U 0.01-16
C301	87-010-404-040		CAP,E 4.7-50 SME
C302	87-010-404-040		CAP,E 4.7-50 SME
C340	87-010-175-080		CAP 560P
C341	87-010-175-080		CAP 560P
C342	87-010-175-080		CAP 560P
C343	87-010-175-080		CAP 560P
C344	87-010-175-080		CAP 560P
C345	87-010-175-080		CAP 560P
C346	87-010-175-080		CAP 560P
C347	87-010-175-080		CAP 560P
C348	87-010-175-080		CAP 560P
C349	87-010-175-080		CAP 560P
C601	87-010-405-040		CAP,E 10-50
C602	87-010-176-080		C-CAP,S 680P-50 SL
C603	87-010-186-080		CAP,CHIP 4700P
C604	87-010-166-080		C-CAP,S 100P-50 SL
C605	87-010-321-080		CHIP CAPACITOR,82P(J)
C606	87-010-490-040		CAP, ELECT 0.1-50
C608	87-010-166-080		C-CAP,S 100P-50 SL
C609	87-010-545-040		CAP,E 0.22-50 SME
C610	87-010-177-080		C-CAP,S 820P-50 SL
C611	87-010-981-040		CAP,E 22-35 5L SRE
C614	87-010-248-040		CAP,E 220-10 SME
C615	87-010-075-040		CAP,E 10-16 5L
C619	87-016-526-080		C-CAP,S 0.47-16 BK
C901	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C902	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C903	87-016-526-080		C-CAP,S 0.47-16 BK
C904	87-010-183-080		C-CAP,S 2700P-50 B
C905	87-010-176-080		C-CAP,S 680P-50 SL
C906	87-016-552-080		C-CAP,S 0.082-16 B K
C907	87-016-552-080		C-CAP,S 0.082-16 B K
C908	87-010-183-080		C-CAP,S 2700P-50 B
C909	87-010-176-080		C-CAP,S 680P-50 SL
C910	87-012-142-080		CAP, S 0.33-16
C911	87-010-196-080		CHIP CAPACITOR,0.1-25
C912	87-016-526-080		C-CAP,S 0.47-16 BK
C913	87-010-401-040		CAP,E 1-50 SME
C914	87-010-494-040		CAP,E 1-50 GAS
C915	87-010-184-080		CHIP CAPACITOR 3300P(K)
C916	87-010-184-080		CHIP CAPACITOR 3300P(K)
C917	87-010-553-040		CAP,E 47-16 GAS
C918	87-010-196-080		CHIP CAPACITOR,0.1-25
C919	87-010-264-040		CAP,E 100-10 5L
C920	87-010-318-080		C-CAP,S 47P-50 CH
C921	87-010-318-080		C-CAP,S 47P-50 CH
C922	87-010-318-080		C-CAP,S 47P-50 CH
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN901	87-099-201-010		CONN,8P 6216 H
FB101	87-008-372-080		FILTER, EMI BL OIRNI
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FL301	8Z-SP1-617-010		FL,10-BT-218GNK
J601	87-A60-651-010		JACK,3.5MONO
J602	87-A60-651-010		JACK,3.5MONO
L101	87-005-130-080		COIL,10UH
L201	87-003-152-080		COIL, 100UH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED201	87-A40-589-040		LED,SLR-56VCT31 RED
LED301	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED302	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED303	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED304	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED305	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED306	87-A40-606-040		LED,SLR-332VC
LED307	87-A40-606-040		LED,SLR-332VC
LED308	87-A40-606-040		LED,SLR-332VC
LED309	87-A40-606-040		LED,SLR-332VC
LED310	87-A40-606-040		LED,SLR-332VC
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M
S310	87-A90-095-080		SW,TACT EVQ11G04M
S311	87-A90-095-080		SW,TACT EVQ11G04M
S312	87-A90-095-080		SW,TACT EVQ11G04M
S313	87-A90-095-080		SW,TACT EVQ11G04M
S314	87-A90-095-080		SW,TACT EVQ11G04M
S315	87-A90-095-080		SW,TACT EVQ11G04M
S316	87-A90-095-080		SW,TACT EVQ11G04M
S317	87-A90-095-080		SW,TACT EVQ11G04M
S318	87-A90-095-080		SW,TACT EVQ11G04M
SW201	87-A91-342-010		SW,RTRY EC16B24104W/O D L20
X201	87-A70-075-080		VIB,CER 4.19MHZ CRHF
TUNER C.B			
C701	87-010-260-080		CAP,ELECT 47-25V
C702	87-010-404-080		CAP,ELECT 4.7-50V
C703	87-012-286-080		CAP,U 0.01-25
C704	87-012-286-080		CAP,U 0.01-25
C709	87-012-195-080		C-CAP,U 100P-50CH
C711	87-010-263-080		CAP,ELECT 100-10V
C712	87-010-196-080		C-CAP,S 0.1-25 ZF
C713	87-012-286-080		CAP,U 0.01-25
C714	87-012-286-080		CAP,U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50CH
C717	87-012-286-080		CAP,U 0.01-25
C719	87-012-286-080		CAP,U 0.01-25
C720	87-012-195-080		C-CAP,U 100P-50CH
C721	87-012-176-080		CAP,15P
C722	87-012-176-080		CAP,15P
C723	87-012-274-080		CHIP CAP,U 1000P-50B
C725	87-012-274-080		CHIP CAP,U 1000P-50B
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-248-080		CAP,ELECT 220-10V
C753	87-012-195-080		C-CAP,U 100P-50 J CH
C755	87-012-286-080		CAP,U 0.01-25
C756	87-012-286-080		CAP,U 0.01-25
C757	87-012-188-080		C-CAP,U 47P-50 CH
C758	87-012-167-080		C-CAP,U 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 ZF
C762	87-012-286-080		CAP,U 0.01-25
C763	87-010-829-080		CAP,U 0.047-16
C765	87-012-286-080		CAP,U 0.01-25
C766	87-012-286-080		CAP,U 0.01-25
C768	87-012-286-080		CAP,U 0.01-25
C769	87-010-260-080		CAP,ELECT 47-25V
C770	87-010-829-080		CAP,U 0.047-16
C771	87-010-383-080		CAP,ELECT 33-25V
C772	87-010-829-080		CAP,U 0.047-16
C773	87-015-785-080		C-CAP,0.1-25 ZF

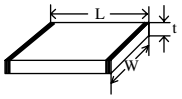
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C774	87-010-263-080		CAP,ELECT 100-10V
C775	87-010-404-080		CAP,ELECT 4.7-50V
C776	87-012-286-080		CAP,U 0.01-25
C777	87-010-400-080		CAP,E 0.47-50 M 11L SME
C778	87-010-401-080		CAP,ELECT 1-50V
C779	87-010-401-080		CAP,ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP,ELECT 10-50V
C782	87-010-405-080		CAP,ELECT 10-50V
C783	87-012-286-080		CAP,U 0.01-25
C784	87-012-286-080		CAP,U 0.01-25
C785	87-010-805-080		C-CAP,S 1-6 ZF
C786	87-010-805-080		C-CAP,S 1-6 ZF
C787	87-012-280-080		C-CAP,U 3300P-50 B
C788	87-012-280-080		C-CAP,U 3300P-50 B
C789	87-012-275-080		C-CAP,U 1200P-50 B
C790	87-012-275-080		C-CAP,U 1200P-50 B
C791	87-010-405-080		CAP,ELECT 10-50V
C793	87-012-274-080		C-CAP,U 1000P-50 B
C794	87-010-406-080		CAP,ELECT 22-50
C795	87-010-829-080		CAP,U 0.047-16 ZF
C796	87-010-403-080		CAP,ELECT 3.3-50V
C797	87-012-276-080		C-CAP,U 1500P-50 KB
C798	87-012-276-080		C-CAP,U 1500P-50 KB
C799	87-010-829-080		CAP,U 0.047-16
C800	87-010-383-080		CAP,ELECT 33-25V
C812	87-012-286-080		CAP,U 0.01-25
C814	87-012-286-080		CAP,U 0.01-25
C818	87-010-196-080		CHIP CAPACITOR,0.1-25
C820	87-010-260-080		CAP,ELECT 47-25V
C821	87-012-286-080		CAP,U 0.01-25
C822	87-012-286-080		CAP,U 0.01-25
C823	87-012-286-080		CAP,U 0.01-25
C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-012-286-080		C-CAP,U 0.01-25 KB
C861	87-012-199-080		C-CAP,U 220P-50 J CH
C862	87-012-199-080		C-CAP,U 220P-50 J CH
C863	87-012-270-080		C-CAP,U 470P-50 KB
C864	87-010-405-080		CAP,E 10-50 M 11L SME
C865	87-010-196-080		C-CAP,S 0.1-25 ZF
C866	87-010-405-080		CAP,E 10-50 M 11L SME
C867	87-012-286-080		C-CAP,U 0.01-25 KB
C868	87-012-184-080		C-CAP,U 33P-50 J CH
C869	87-012-180-080		C-CAP,U 22P-50 J CH
C940	87-012-286-080		C-CAP,U 0.01-25 KB
C942	87-012-172-080		C-CAP,U 10P-50 D CH
C947	87-012-286-080		C-CAP,U 0.01-25 KB
C949	87-A10-039-080		C-CAP,U 470P-50 J CH
C952	87-012-286-080		C-CAP,U 0.01-25 KB
C958	87-012-186-080		C-CAP,S 0.01-25 KB
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP,E 1-50 M 11L SME
CF801	87-008-423-010		FLTR,CF SFE10.7MS3G-A
CF802	82-785-747-010		CF,MS2 GHY R
CN601	87-099-029-010		CONN,12P H BLK 6216
CN602	87-099-211-010		CONN,4P V BLK 6216
FFC601	88-912-161-110		FF-CABLE,12P 1.25 160
FFC602	88-904-181-110		FF-CABLE,4P 1.25
FFE801	A8-6ZA-191-130		6ZA-1 FEENM
J802	87-033-241-010		TERMINAL,ANT 2P AJ-2039
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A90-733-010		FLTR,PCFAZH-450(TOK)
L781	87-005-847-080		COIL,2.2UH K CECS
L791	87-A50-027-010		COIL,1 POLE MPX(TOK)
L792	87-A50-027-010		COIL,1 POLE MPX(TOK)
L832	87-005-847-080		COIL,2.2UH K CECS
L941	87-A50-020-010		COIL,ANT LW(COI)252KHZ
L942	87-A50-019-010		COIL,OSC LW(COI) 856KHZ
L981	87-NF4-651-110		COIL,AM PACK 2N(TOM)
TC942	87-A91-658-010		TRIMMER,30P 4.0X4.5 ECRL
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309
CONN 10P C.B			
C190	87-010-196-080		CHIP CAPACITOR,0.1-25
CN904	87-A60-575-010		CONN,10P H 52303
CN905	87-099-198-010		CONN,10P 6216 V
AC 1 C.B			
⚠ PT101	88-SP1-604-010		PT,EZ
SUB TRANS C.B			
C138	87-010-387-080		CAP,E 470-25 SME
⚠ C140	87-A10-480-090		CAP,CER 4700P-250 M E KH
CN102	8Z-SP1-619-110		CONN ASSY,4P
⚠ PT102	8A-NF8-662-010		PT,SUB ANF-8 (E)
⚠ RY102	87-A90-976-010		RELAY,AC DC12V SDT-S-112LMR
⚠ T101	87-A60-317-010		TERMINAL, 1P MSC
⚠ T102	87-A60-317-010		TERMINAL, 1P MSC
AC 2 C.B			
⚠ PR101	87-A90-195-080		PROTECTOR 7A 125V 49
⚠ PR102	87-A90-195-080		PROTECTOR 7A 125V 49
⚠ PR103	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR104	87-026-682-080		PROTECTOR,10A 60V491
WH101	87-A90-460-010		HLDR,WIRE 2.5-7P
VM C.B			
C127	87-016-143-080		CAP,E 3.3-50M SME
ECO C.B			

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

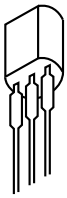
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION (MX-NH2000)



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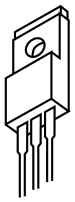
KTC3198GR

CC5551
CSD1489B



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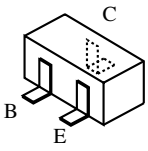
2SB1625
2SD2494



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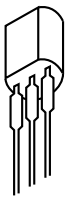
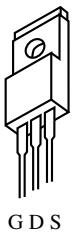
2SA1514 RN1410
2SC3052 RT1N141C
2SD1306E RT1N144C
CMBT5551 RT1P141C
CSD1306E RT1P144C



2SA1296



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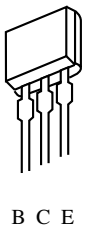

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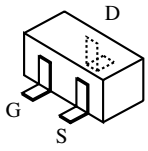

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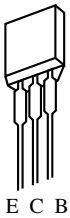
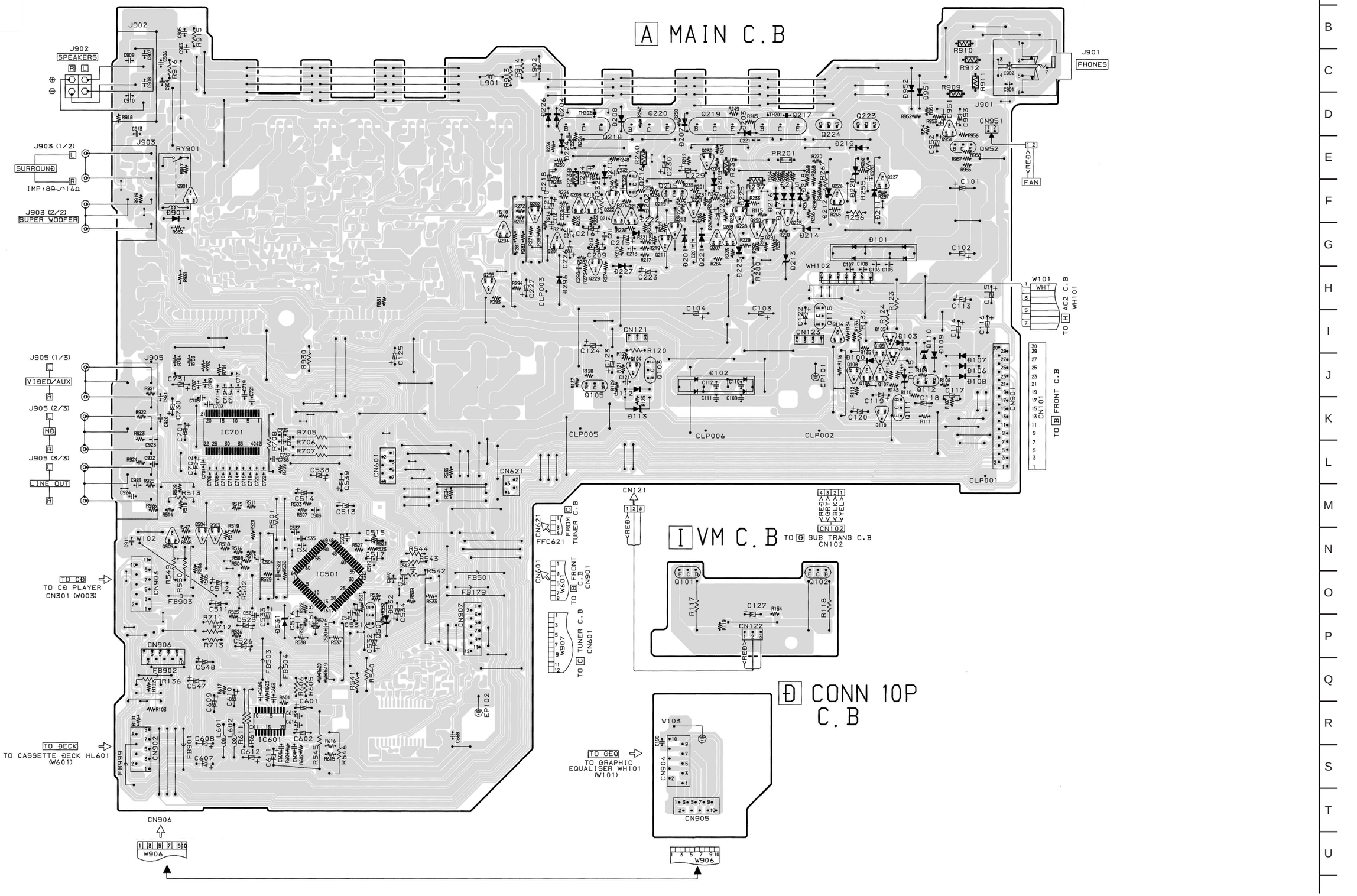
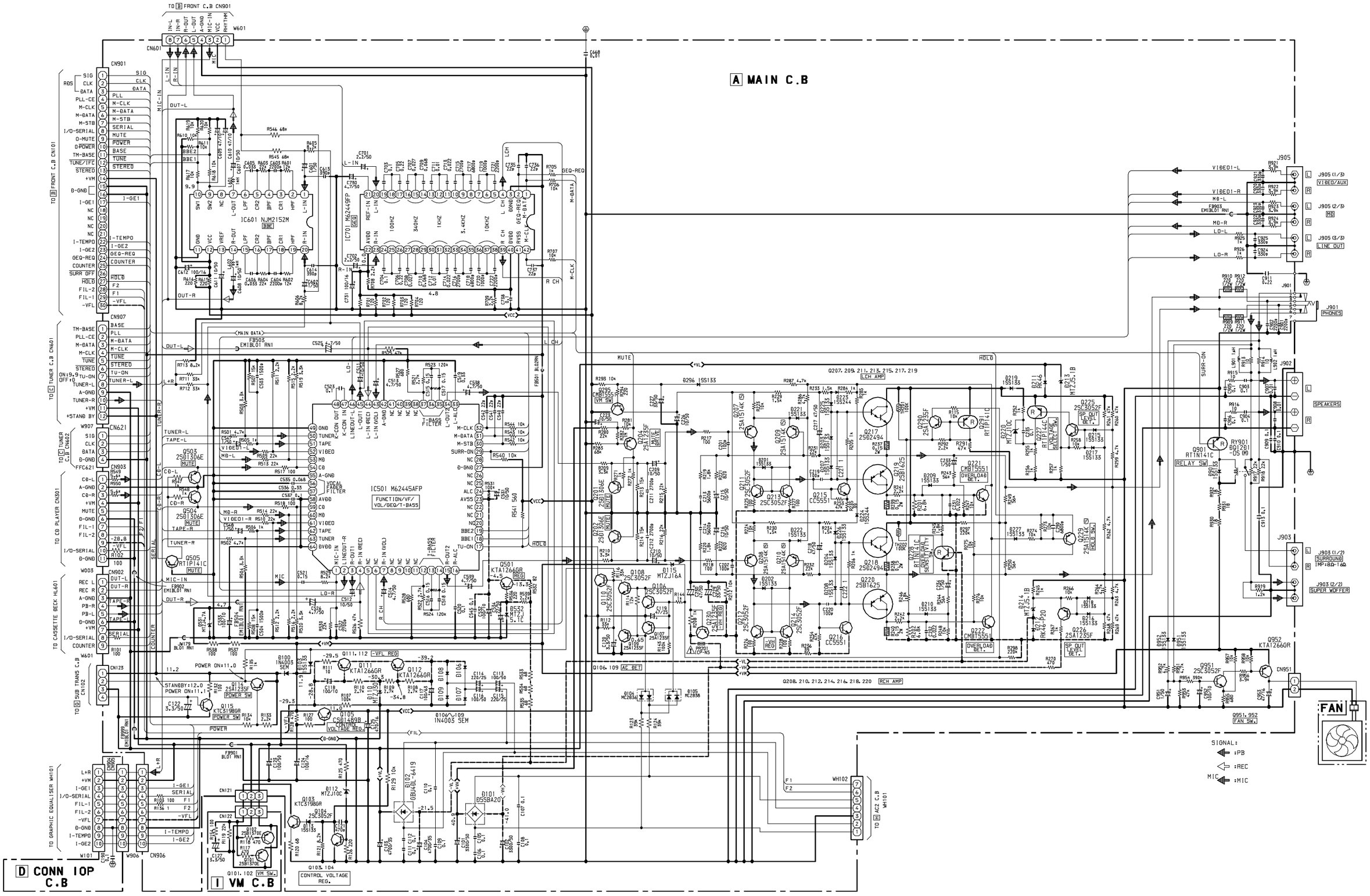


DTC114ES


A MAIN C.B
I VM C.B
TO G SUB TRANS C.B CN102
Đ CONN 10P C.B
J902 SPEAKERS
J903 (1/2) SURROUND IMP:8Ω 16Ω
J903 (2/2) SUPER WOOFER
J905 (1/3) VIDEO/AUX
J905 (2/3) MD
J905 (3/3) LINE OUT
J901 PHONES
FAN
TO C TO CD PLAYER CN301 (W003)
TO Đ TO CASSETTE ĐECK HL601 (W601)
TO G TO GRAPHIC EQUALISER WH101 (W101)
TO H AC2 C.B WH101
TO B FRONT C.B CN101
FROM TUNER C.B FFC621
TO TUNER C.B CN601
TO B FRONT C.B CN901
IC701
IC501
IC601

SCHEMATIC DIAGRAM – 1 (MAIN / VM / CONN 10P : MX-NH2000)



B FRONT C.B

FROM A MAIN C.B
CN601
W601
TO CN901

LEĐ310, LEĐ305
S305
MĐ

LEĐ309, LEĐ304
S304
CĐ

LEĐ308, LEĐ303
S303
VIĐEO/AUX

FL301
(ĐISPLAY)

LEĐ307, LEĐ302
S302
TUNER BANĐ

LEĐ306, LEĐ301
S301
TAPE ĐECK 1/2

IC202
(REMOTE
SENSOR)

LEĐ201
ECO

SW201
VOLUME

S307
BBE

S306
TBASS

S311
POWER

J602
MIC 2

J601
MIC 1

S310
ECHO

S309
MIC

S308
KARAOKE

CN101

S318
AG

S317
PTY

S316
RT

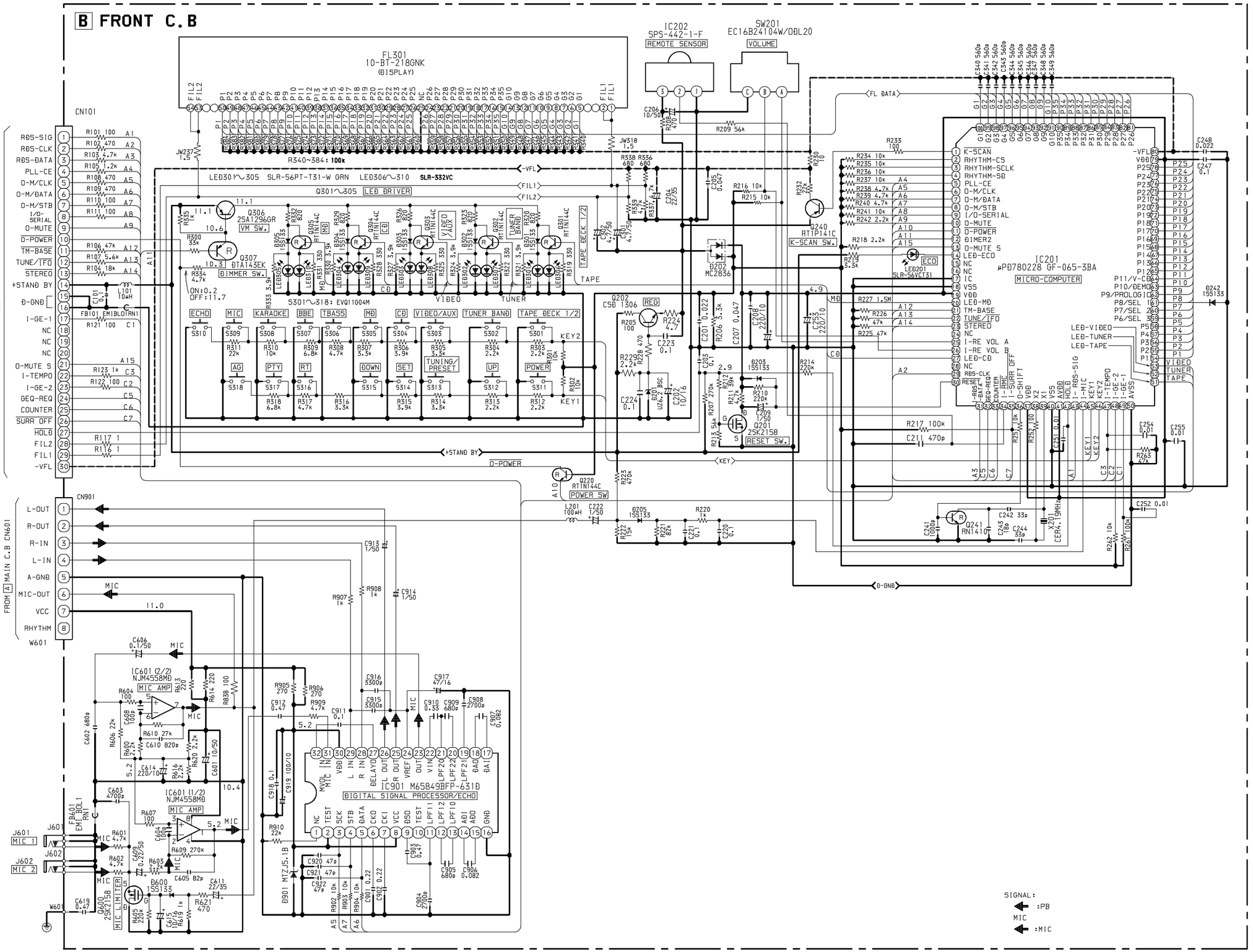
S312
UP

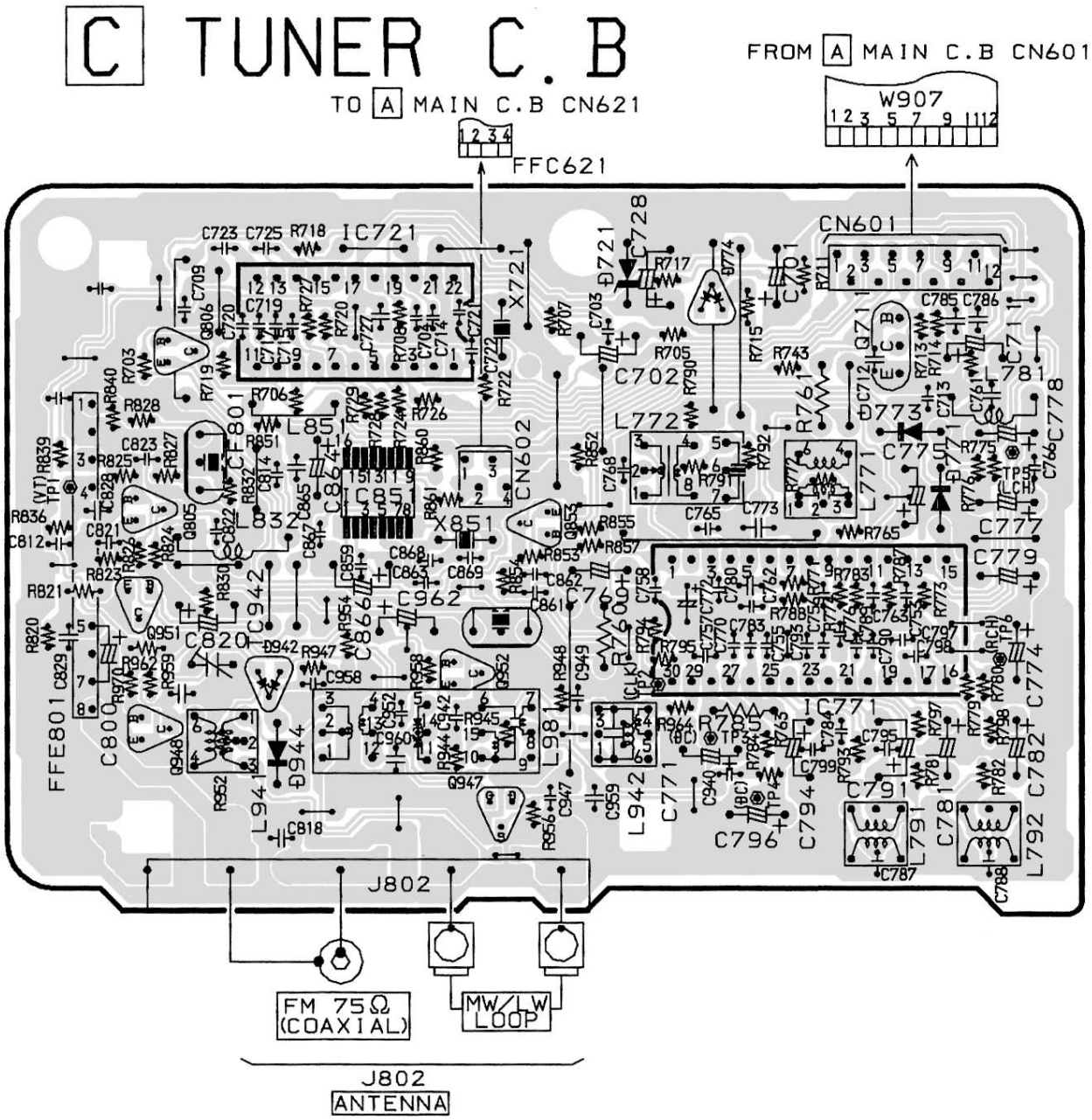
S315
ĐOWN

S314
SET

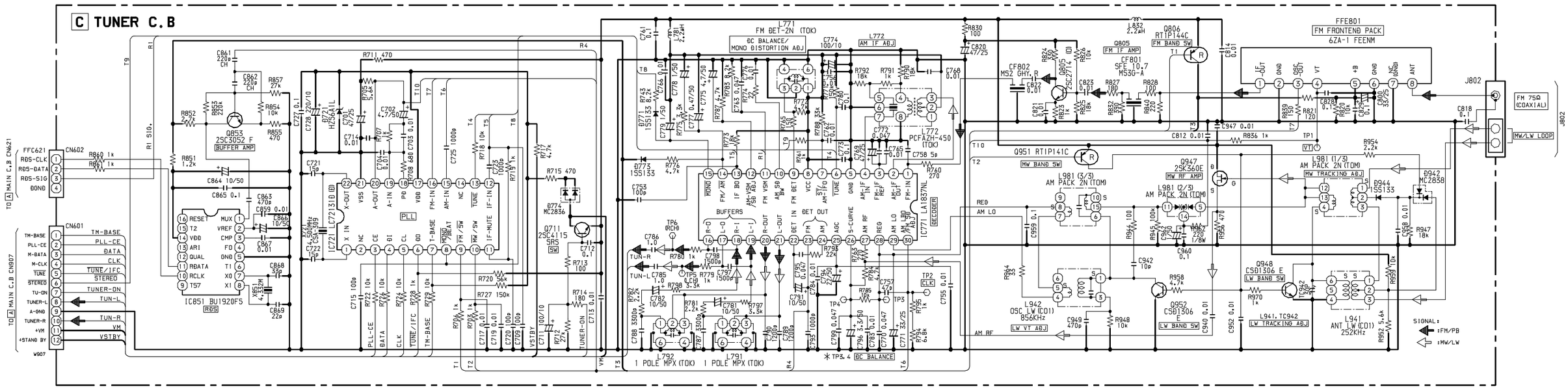
S313
TUNING/PRESET

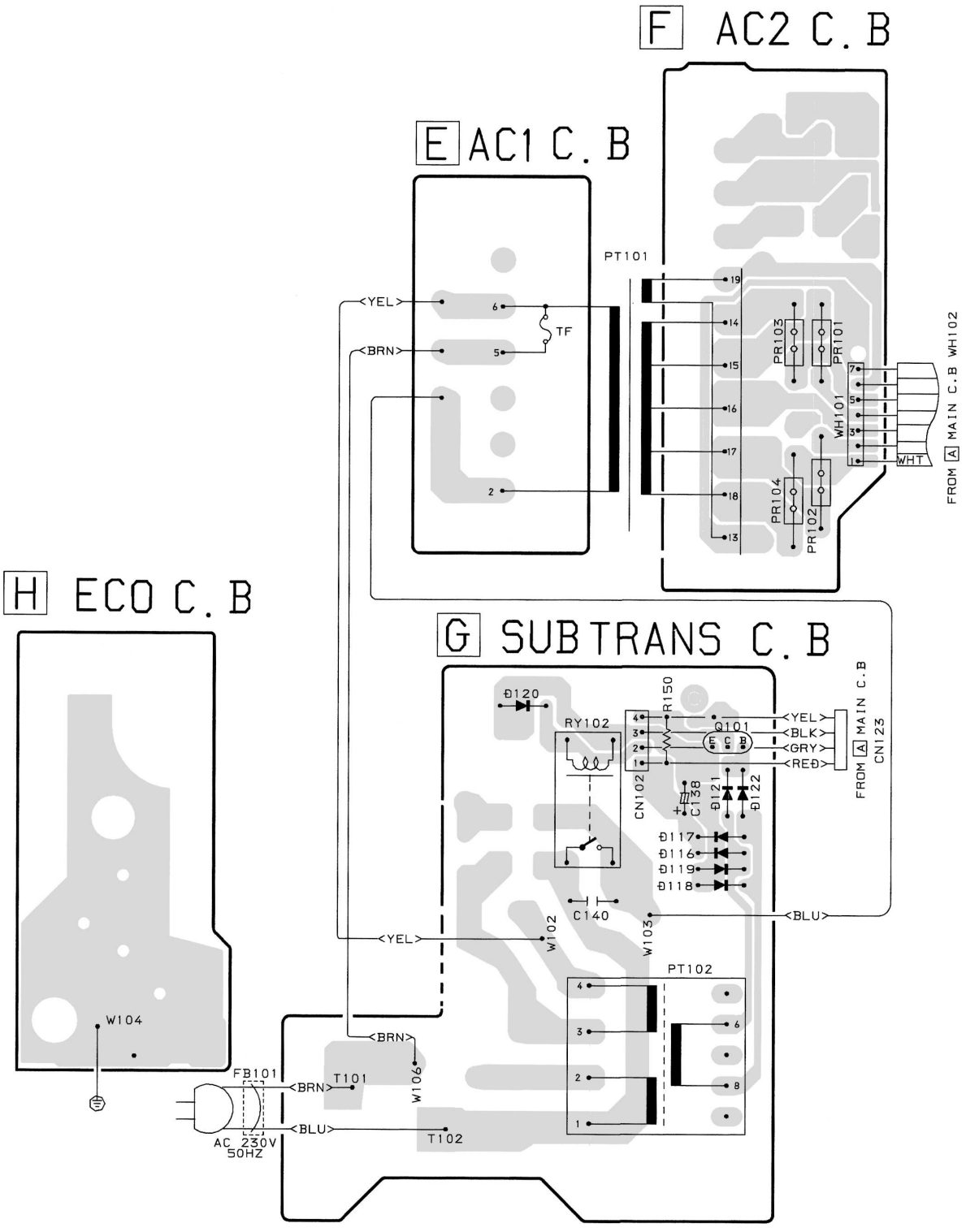
FROM A MAIN C.B CN901


B FRONT C.B
FL301
10-BT-218GNK
(DISPLAY)
IC202
SPS-442-1-F
REMOTE SENSOR
SW201
EC16B24104W/OBL20
VOLUME
CN101
FROM A MAIN C.B CN901
IC201
μPD780228 GF-065-3BA
MICRO-COMPUTER
K-SCAN
RHYTHM-CS
RHYTHM-SCLK
RHYTHM-SD
PLL-CE
O-M/CLK
O-M/DATA
O-M/STB
I/O-SERIAL
O-MUTE
O-POWER
DIMER2
O-MUTE S
LED-ECO
VIDEO
TUNER
TAPE
Q306 2SA1296GR VM SW.
Q307 DTA143EK DIMMER SW.
Q240 RT1P141C K-SCAN SW.
Q202 CSD1306 REG
Q201 2SK2158 RESET SW.
Q220 RT1N144C POWER SW
Q241 RN1410
D202 MC2836
D205 1SS133
D901 MTZJ5.1B
D600 1SS133
IC601 (2/2) NJM4558MD MIC AMP
IC601 (1/2) NJM4558MD MIC AMP
IC901 M65849BFP-631D
DIGITAL SIGNAL PROCESSOR/ECHO
MIC LIMITER
ECHO
MIC
KARAOKE
BBE
TBASS
MD
CD
VIDEO/AUX
TUNER BAND
TAPE DECK 1/2
TUNING/PRESET
AG
PTY
RT
DOWN
SET
UP
POWER
KEY1
KEY2
+STAND BY
O-POWER
KEY
B-GND
FL DATA
SIGNAL:
:PB
MIC
:MIC

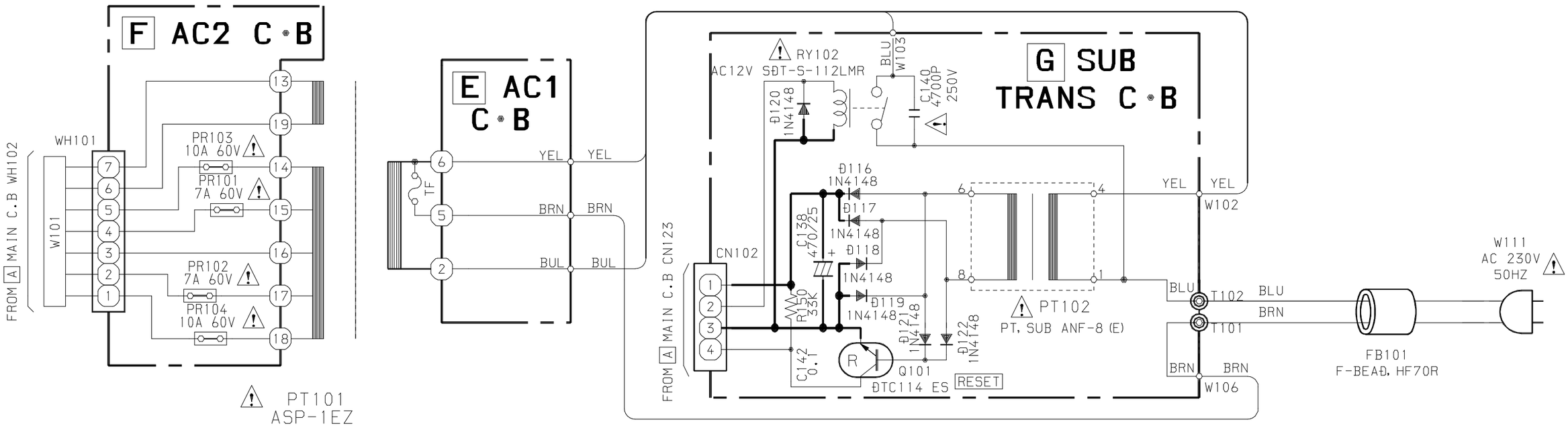

C TUNER C.B
TO A MAIN C.B CN621
FROM A MAIN C.B CN601
FFC621
W907
CN601
IC721
X721
CN602
X851
J802
FM 75Ω (COAXIAL)
MW/LW LOOP
J802 ANTENNA

SCHEMATIC DIAGRAM – 3 (TUNER : MX-NH2000)



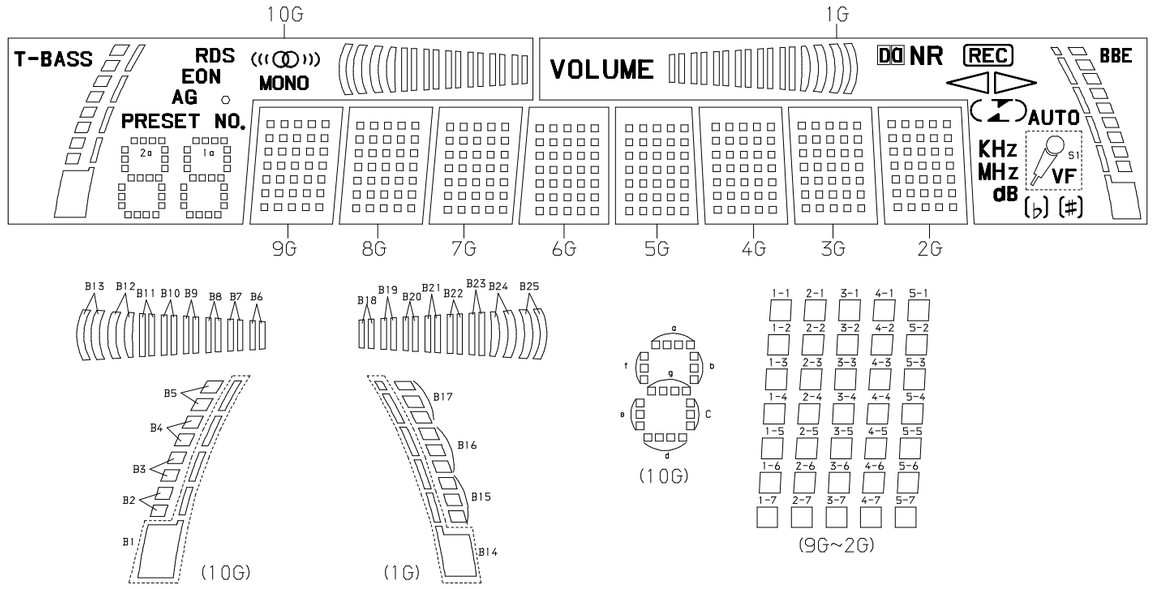

F AC2 C.B
E AC1 C.B
H ECO C.B
G SUB TRANS C.B
PT101
TF
PR103
PR101
PR104
PR102
WH101
WHT
FROM A MAIN C.B WH102
YEL
BRN
BLU
BLK
GRY
RED
D120
RY102
R150
Q101
CN102
C138
D121
D122
D117
D116
D119
D118
C140
W102
W103
PT102
CN123
FROM A MAIN C.B
W104
W106
FB101
T101
T102
AC 230V
50HZ

SCHEMATIC DIAGRAM – 4 (AC1 / SUB TRANS / AC2 : MX-NH2000)



FL GRID (10-BT-218GNK) ASSIGNMENT AND ANODE CONNECTION (MX-NH2000)

GRID ASSIGNMENT

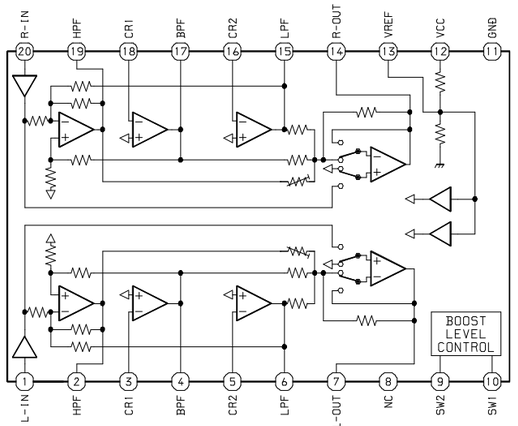


ANODE CONNECTION

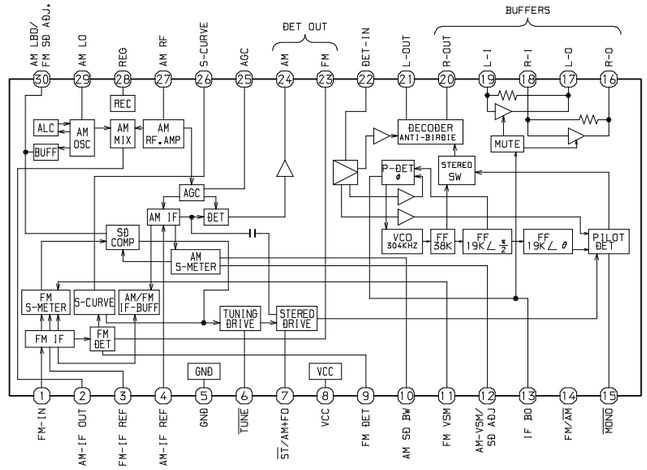
	10G	9G~2G	1G
P1	((( )))	1-1	VOLUME
P2	B6	2-1	B18
P3	B7	3-1	B19
P4	B8	4-1	B20
P5	B9	5-1	B21
P6	B10	1-2	B22
P7	B11	2-2	B23
P8	B12	3-2	B24
P9	B13	4-2	B25
P10	MONO	5-2	NR
P11	RDS	1-3	REC
P12	EON	2-3	◁
P13	AG	3-3	▷
P14	○	4-3	(
P15	PRESET No.	5-3	◢
P16	2a	1-4	)
P17	2f	2-4	KHz
P18	2b	3-4	MHz
P19	2g	4-4	dB
P20	2e	5-4	(b)
P21	2c	1-5	♭
P22	2d	2-5	S1
P23	1a	3-5	AUTO
P24	1f	4-5	♯
P25	1b	5-5	(#)
P26	1g	1-6	B14
P27	1e	2-6	B17
P28	1c	3-6	B16
P29	1d	4-6	B15
P30	T-BASS	5-6	BBE
P31	B1	1-7	-
P32	B2	2-7	-
P33	B3	3-7	-
P34	B4	4-7	-
P35	B5	5-7	-

IC BLOCK DIAGRAM (MX-NH2000)

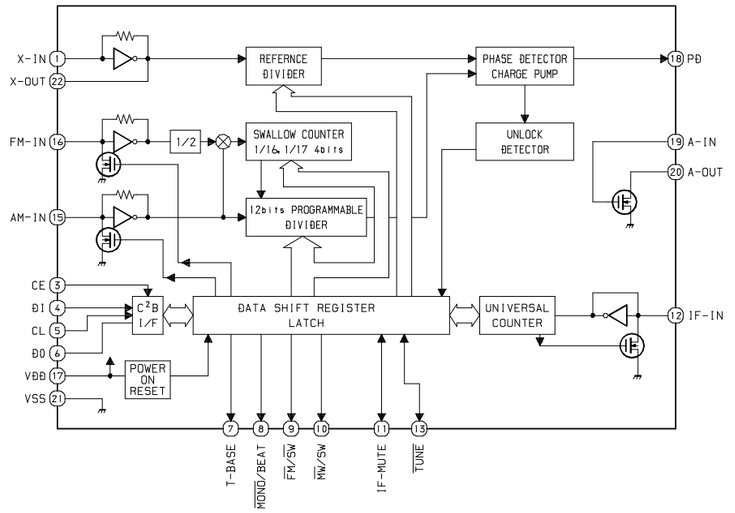
IC, NJM2152M



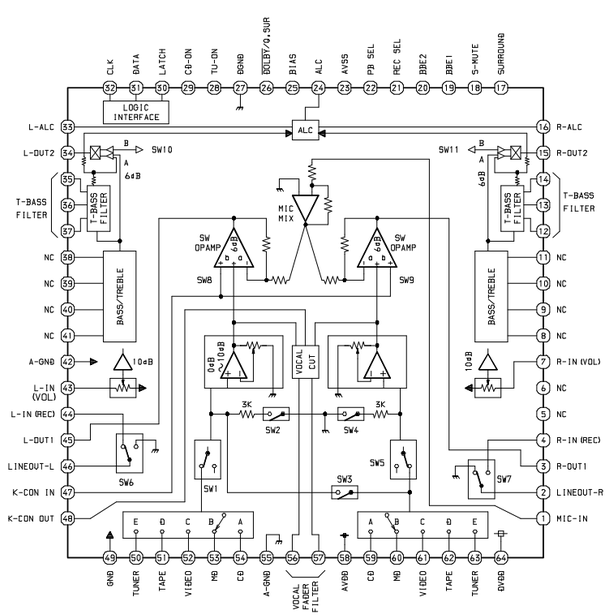
IC, LA1837NL



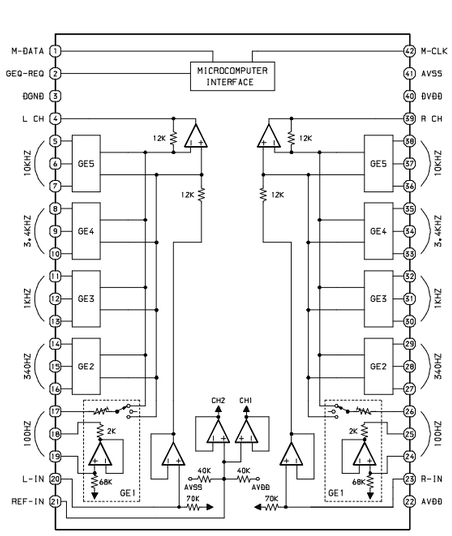
IC, LC72131D



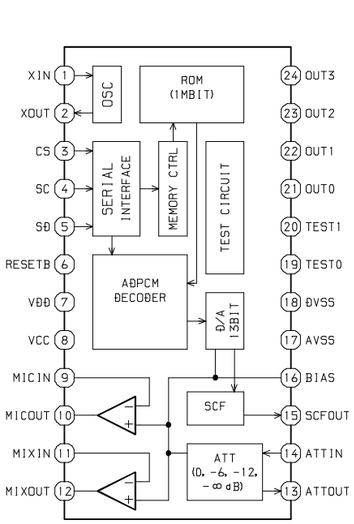
IC, M62445AFP



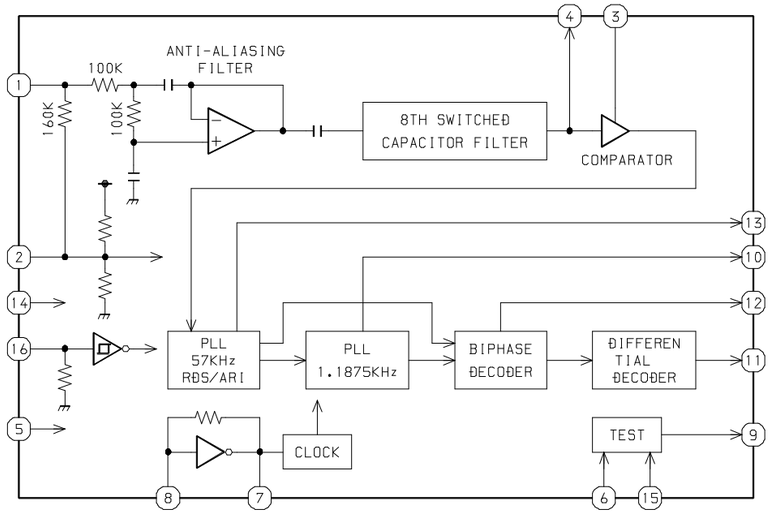
IC, M62449FP



IC, BU9990-03FS



IC, BU1920FS



IC DESCRIPTION (MX-NH2000)

IC, UPD780228GF-065-3BA

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{K-SCAN}}$	O	Key scan output.
2	RHYTHM-CS	O	Chip select output to IC, BU9990-03FS. (Not used)
3	RHYTHM-SCLK	O	Clock output to IC, BU9990-03FS. (Not used0
4	RHYTHM-SD	O	Data output to IC, BU9990-03FS. (Not used)
5	PLL CE	O	PLL IC chip enable output.
6	O-M/CLK	O	Main clock output.
7	O-M/DATA	O	Main data output.
8	O-M/STB	O	Main strobe output.
9	I/O-SERIAL	I/O	Communication port for GEQ, CD and DECK.
10	O-MUTE	O	System mute (ON when "H").
11	$\overline{\text{O-POWER}}$	O	System power supply (ON when "L").
12	DIMER 2	O	Dimmer control ("L" when 2).
13	O-MUTE S	O	Sound L, R, Center, SW Mute.
14	LED-ECO	O	ECO LED output.
15	NC	–	Not connected.
16	NC	–	Not connected.
17	IC	–	Connect to GND.
18	VSS	–	GND.
19	VDD	–	Power supply terminal.
20	LED-MD	O	MD LED output.
21	TM-BASE	I	Time base input.
22	TUNE/$\overline{\text{IFO}}$	I	Tuning detection input.
23	$\overline{\text{STEREO}}$	I	Stereo detection input.
24	NC	–	Not connected.
25	I-RE VOL A	I	Rotary Encoder Input A / B.
26	I-RE VOL B		
27	LED-CD	O	CD LED output.
28	NC	–	Not connected.
29	RDS-CLK	I	TUNER RDS IC clock input.
30	$\overline{\text{RESET}}$	I	Reset input.
31	I-RDS	I	Tuner RDS input.
32	GEQ-REQ	O	Latch output to IC, M62449FP.
33	COUNTER	I	Tape counter input.
34	I-$\overline{\text{RMC}}$	I	Remote controller input (Active "L").
35	$\overline{\text{I-SURR-OFF}}$	I	Stop surround function when using head phone.
36	O-SHIFT	O	Output for oscillated frequency shift.
37	VDD	–	Power supply terminal.
38	X2	–	4.19MHz oscillator circuit.
39	X1		
40	VSS	–	GND.
41	AVDD	–	Power supply terminal.
42	$\overline{\text{HOLD}}$	I	Power failure / over current detected input.

Pin No.	Pin Name	I/O	Description
43	I-RDS-SIG	I	Tuner tuning signal level A/D input.
44	I-MIC	I	MIC input level detection.
45	KEY1	I	KEY1 input.
46	KEY2	I	KEY2 input.
47	I-TEMPO	I	TEMPO input (100Hz, 3.3kHz).
48	I-GE-2	I	DEMO, TIMER, CLOCK, SPICE A, AUTO SPICE / FILL IN input.
49	I-GE-1	I	JOG, SPICE B SW input.
50	AVSS	–	GND.
51	LED-TAPE	O	Tape LED output.
52	LED-TUNER	O	Tuner LED output.
53	LED-VIDEO	O	Video LED output.
54~58	P1~P5	O	FL segment P1~P5 output.
59	P6/SEL3	I/O	FL segment P6 output / Select 3 diode input. (Not used.)
60	P7/SEL2	I/O	FL segment P7 output / Select 2 diode input. (Not used.)
61	P8/SEL1	I/O	FL segment P8 output / Select 1 diode input. (Not used.)
62	P9/PROLOGIC	I/O	FL segment P9 output / PROLOGIC select diode input. (Not used.)
63	P10/DEMO	I/O	FL segment P10 output / DEMO select diode input. (Not used.)
64	P11/V-CD	I/O	FL segment P11 output / V-CD select diode input. (Not used.)
65~78	P12~P25	O	FL segment P12~P25 output.
79	VDD	–	Power supply terminal.
80	-VFL	–	Power FL display negative supply terminal.
81~90	P26~P35	O	FL segment P26~P35 output.
91~100	G10~G1	O	FL grid G10~G1 output.

IC, M65849BFP-631D

Pin No.	Pin Name	I/O	Description
1	MCLKONT	I	Controls build-in-clock generation circuit with external R.
2	TEST1	I	Test mode "H" : Normal / "L" : Test.
3	CLOCK	I	Clock input via serial bus.
4	STB	I	Strobe input via serial bus.
5	DATA	I	Data input via serial bus.
6	CKO	O	Clock output.
7	CKI	I	Clock input.
8	VCC	–	Power supply.
9	DSO	O	(L+R) or (L-R) or MIC signal output.
10	TEST	O	Memory/Mute/Sampling data output. (Not used.)
11	LPF11	I	Low pass filter 1 input 1.
12	LPF12	I	Low pass filter 1 input 2.
13	LPF1O	O	Low pass filter 1 output.
14	ADI	I	A/D integrator input.
15	ADO	O	A/D integrator output.
16	GND	–	Ground.
17	DAI	I	D/A integrator input.
18	DAO	O	D/A integrator output.
19	LPF21	I	Low pass filter 2 input 1.
20	LPF22	I	Low pass filter 2 input 2.
21	LPF2O	O	Low pass filter 2 output.
22	VIN	I	Feedback volume input.
23	OUT	O	Microphone output.
24	VREF	–	Reference.
25	R OUT	O	Right channel mixing output.
26	L OUT	O	Left channel mixing output.
27	DELAY OUT	O	Delay signal output.
28	R IN	I	Right channel mixing input.
29	L IN	I	Left channel mixing input.
30	VDD	–	Power supply.
31	MIC IN	I	Microphone input.
32	MVOL IN	I	Mix volume input.

ADJUSTMENT <TUNER>(MX-NH2000)

< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to MW 1602kHz and check that the test point is 2052kHz ± 45Hz.

2. MW VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to MW 1602kHz and check that the test point is less than 8.0V. Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW Tracking Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location : L981 (1/3)
   Method : Set to MW 999kHz and adjust L981 (1/3) so that the test point becomes maximum.

4. LW VT Adjustment
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V ± 0.05V.
   Then set to LW 290kHz and check that the test point is less than 8.0V.

5. LW Tracking Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location :
   L941 ..... 144kHz
   TC942 ..... 290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

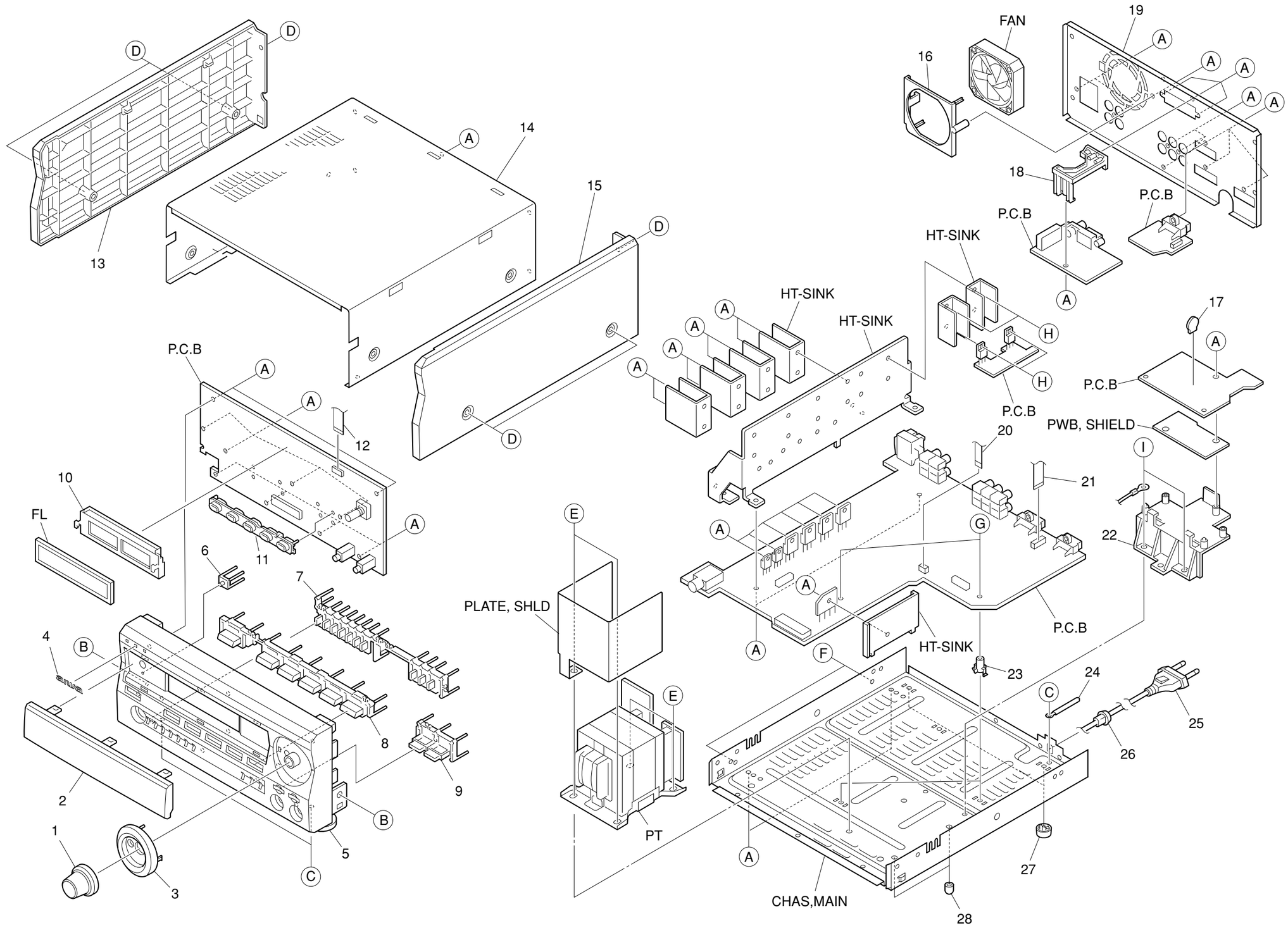
6. AM IF Adjustment
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   • Adjustment location :
   L772 ..... 450kHz

7. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

8. FM Tracking Check
   Settings : • Test point : TP5 (Lch), TP6 (Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 13dBμV.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC balance)
   : TP5(Lch), TP6(Rch) (Distortion)
   • Adjustment location : L771
   • Input level : 60dBμV
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 is 0V ± 300mV. Next, check the distortion is less than 1.3 %.

MECHANICAL EXPLODED VIEW 1 / 1 (MX-NH2000)



MECHANICAL PARTS LIST 1 / 1 (MX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SP1-011-010		KNOB,RTRY VOL
2	8A-SP1-028-010		WINDOW,DISP EZ
3	8A-SP1-012-010		RING,VOL
4	87-CE3-023-010		BADGE,AIWA 30N SILV
5	8A-SP1-025-010		CABI,FR EZ
6	8Z-SP1-015-010		REFLECTOR,ECO
7	8A-SP1-016-010		KEY,RDS
8	8Z-SP1-010-010		KEY,ASSY FUN
9	8A-SP1-007-010		KEY,BBE
10	88-SX1-203-210		GUIDE,FL
11	8Z-SP1-202-110		GUIDE,LED FUN
12	88-908-281-110		FF-CABLE, 8P 1.25 280MM
13	8A-SP1-017-010		PANEL,SIDE L
14	8A-SP1-002-010		CABI,STEEL
15	8A-SP1-018-010		PANEL,SIDE R
16	8Z-SP1-207-010		COVER, FAN
17	87-A91-331-010		COVER,CAPACITOR 851040
18	88-AR1-203-010		HLDR,TU
19	8A-SP1-021-010		PANEL,REAR EZSM<EZSM>
19	8A-SP1-022-010		PANEL,REAR KSM<KSM>
20	88-904-151-110		FF-CABLE, 4P 1.25 150MM
21	88-910-071-110		FF-CABLE, 10P 1.25 70MM
22	8Z-SP1-209-010		HLDR,PWB ECO
23	8Z-SP1-208-010		HLDR,PWB 13.5
24	87-064-185-010		HLDR,WIRE PVC 0.5
⚠ 25	87-A80-143-010		AC CORD ASSY,E BLK<KSM>
⚠ 25	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI<EZSM>
26	87-085-185-010		BUSHING, AC CORD (E)CM-22B
27	87-085-213-010		FOOT,H12.5
28	8Z-NB8-240-010		COVER, PL
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-591-094-410		QIT+3-6
C	87-067-688-010		BVTT+3-6
D	87-B10-091-010		UTT2+3-10 W/O SLOT BLK
E	87-078-191-010		S-SCREW,IT+4-10 SW CH
F	87-721-095-410		QT2+3-8GLD W/O SLOT
G	87-067-822-010		BVT2+3-20 W/O SLOT
H	87-067-758-010		BVT2+3-12 W/O SLOT
I	87-067-579-010		BVT2+3-8 W/O SLOT

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

MODEL NO.

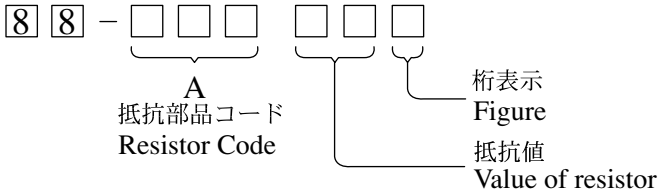
DX-NH2000

ELECTRICAL MAIN PARTS LIST

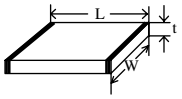
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-SX1-608-010		C-IC,UPD78044HGF
TRANSISTOR			
	87-026-263-080		C-TR,RN1410
	87-A30-076-080		C-TR,2SC3052F
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-070-136-080		ZENER,MTZJ5.1B
MAIN C.B.			
C301	87-010-322-080		C-CAP,S 100P-50 CH
C305	87-010-197-080		CAP, CHIP 0.01 DM
C310	87-016-462-080		C-CAP,S 1-16 F
C311	87-016-462-080		C-CAP,S 1-16 F
C312	87-016-462-080		C-CAP,S 1-16 F
C313	87-010-184-080		CHIP CAPACITOR 3300P(K)
C314	87-010-402-040		CAP,E 2.2-50 SME
CN301	87-009-241-010		CONNECTOR, 11P
CN302	87-A60-061-010		CONN,06P V 9604S-06C
CN303	87-099-015-010		CONN,13P 6216V
CN304	87-099-667-010		CONN,8P TUC-P8P-B1
CN305	87-099-570-010		CONN,13P TUC-P13P-B1
FB301	87-008-372-080		FILTER, EMI BL OIRNI
FB302	87-008-372-080		FILTER, EMI BL OIRNI
FB303	87-008-372-080		FILTER, EMI BL OIRNI
FB304	87-008-372-080		FILTER, EMI BL OIRNI
FB305	87-008-372-080		FILTER, EMI BL OIRNI
FB306	87-008-372-080		FILTER, EMI BL OIRNI
FB307	87-008-372-080		FILTER, EMI BL OIRNI
L301	87-005-130-080		COIL,10UH
W1	88-913-121-110		FF-CABLE,P1.25
W2	88-906-421-110		FF-CABLE,6P 1.25 420MM
W3	88-SX1-610-010		CORD,FG 11P
FRONT C.B.			
C1	87-010-264-040		CAP,E 100-10 5L
C2	87-010-072-040		CAP,E 2.2-50 5L
C4	87-010-246-040		CAP,E 47-35 SME
C5	87-010-190-080		S CHIP F 0.01
C6	87-010-196-080		CHIP CAPACITOR,0.1-25
C7	87-010-197-080		CAP, CHIP 0.01 DM
C8	87-010-314-080		C-CAP,S 22P-50V
C9	87-010-318-080		C-CAP,S 47P-50 CH
C10	87-010-316-080		C-CAP,S 33P-50 CH
C11	87-010-196-080		CHIP CAPACITOR,0.1-25
C12	87-010-197-080		CAP, CHIP 0.01 DM
C14	87-010-405-040		CAP,E 10-50
C15	87-010-405-040		CAP,E 10-50
C201	87-018-134-080		CAPACITOR,TC-U 0.01-16
C202	87-010-197-080		CAP, CHIP 0.01 DM
C203	87-010-197-080		CAP, CHIP 0.01 DM
C204	87-018-134-080		CAP, TC U 0.01-16 N Y
C253	87-010-178-080		CHIP CAP 1000P
C254	87-010-178-080		CHIP CAP 1000P
C255	87-010-178-080		CHIP CAP 1000P
C256	87-010-178-080		CHIP CAP 1000P
CN1	87-099-669-010		CONN,8P TUC-P8X-B1
CN2	87-099-559-010		CONN,13P TUC-P13X-B1
FB101	87-A90-978-010		F-BEAD,7394-12.7-12.7 HF7ORH
FL201	8Z-SX1-608-010		FL,6-BT-303GNK
L1	87-005-152-080		COIL,10UH
L2	87-005-152-080		COIL,10UH
L3	87-005-152-080		COIL,10UH
L5	87-005-152-080		COIL,10UH
LED203	87-A40-263-080		LED,SLH-56PCT31 GRN
LED204	87-A40-263-080		LED,SLH-56PCT31 GRN
LED205	87-A40-317-080		LED,SLR-342VCT31 RED
LED206	87-A40-317-080		LED,SLR-342VCT31 RED
LED207	87-A40-317-080		LED,SLR-342VCT31 RED
S201	87-A90-095-080		SW,TACT EVQ11G04M
S202	87-A90-095-080		SW,TACT EVQ11G04M
S203	87-A90-095-080		SW,TACT EVQ11G04M
S204	87-A90-095-080		SW,TACT EVQ11G04M
S205	87-A90-095-080		SW,TACT EVQ11G04M
S206	87-A90-095-080		SW,TACT EVQ11G04M
S207	87-A90-095-080		SW,TACT EVQ11G04M
S208	87-A90-095-080		SW,TACT EVQ11G04M
X1	87-A70-075-080		VIB,CER 4.19MHZ CRHF
KEY C.B.			
S101	87-A90-095-080		SW,TACT EVQ11G04M
S102	87-A90-095-080		SW,TACT EVQ11G04M

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

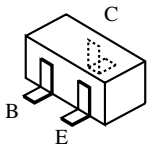
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



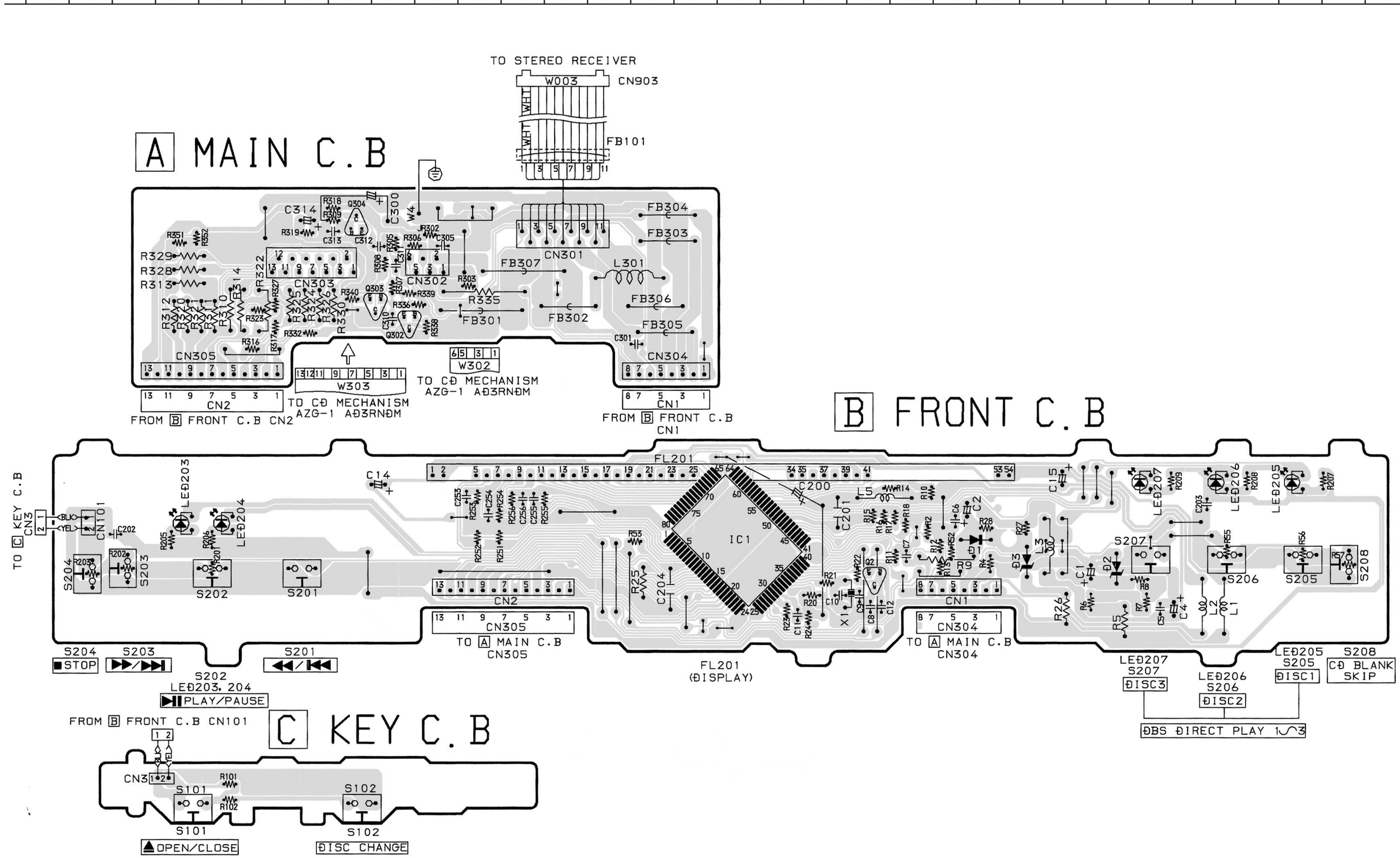
チップ抵抗
Chip resistor

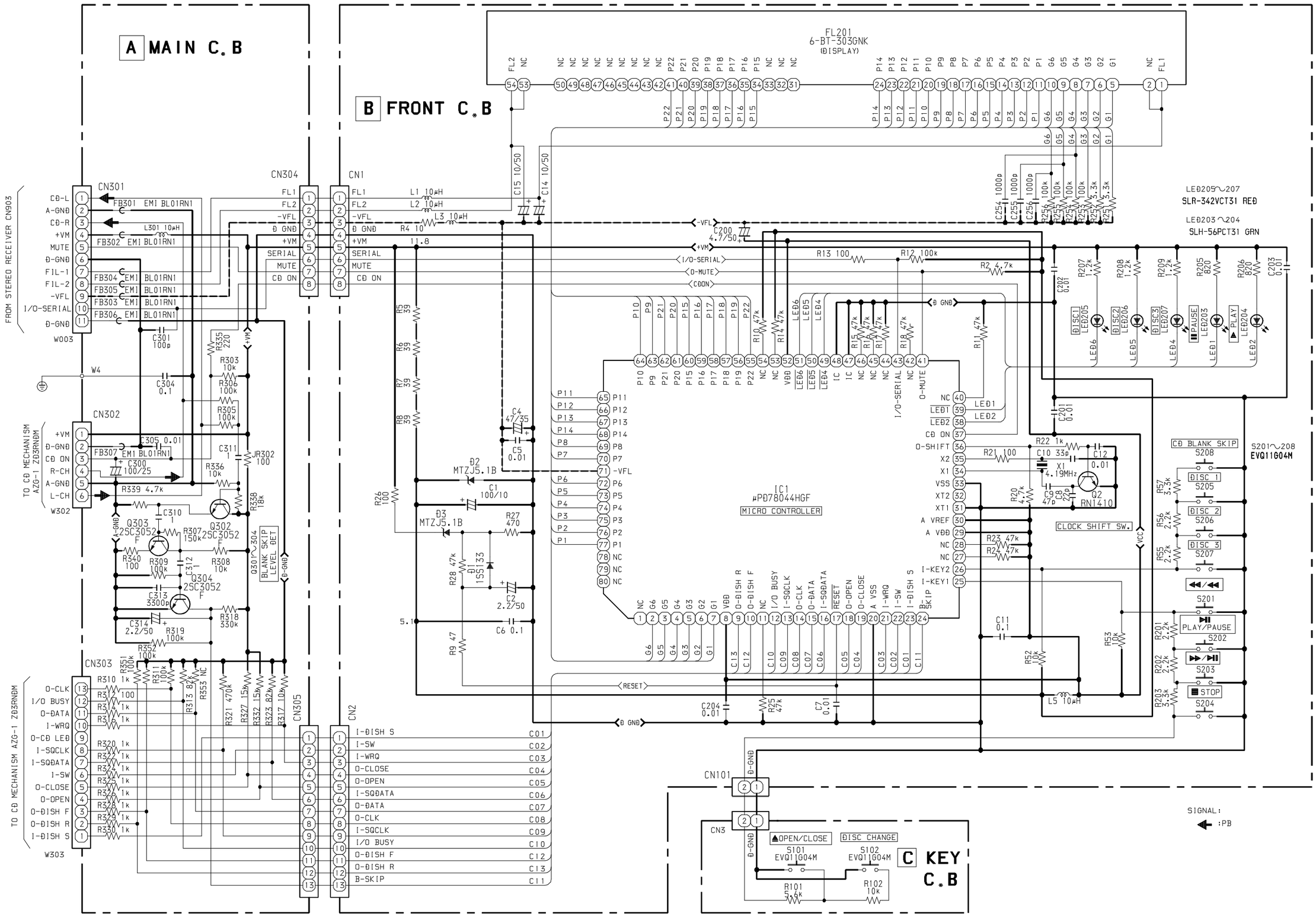
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION (DX-NH2000)



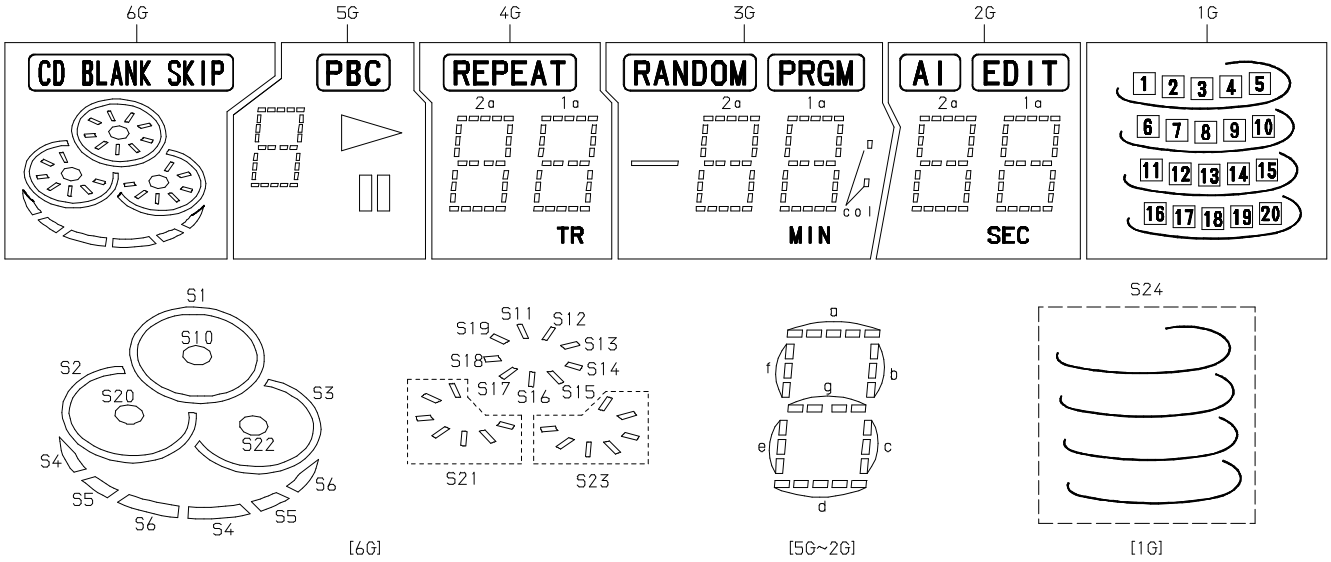
2SC3052
RN1410


A MAIN C.B
TO STEREO RECEIVER
W003
CN903
FB101
CN303
CN302
CN301
CN305
CN304
W303
W302
TO CD MECHANISM AZG-1 ADJRNDM
FROM B FRONT C.B CN2
FROM B FRONT C.B CN1
B FRONT C.B
FL201
IC1
CN2
CN1
TO C KEY C.B CN3
TO A MAIN C.B CN305
TO A MAIN C.B CN304
FL201 (DISPLAY)
S204 STOP
S203
S202 LED203, 204 PLAY/PAUSE
S201
S207 DISC3
S206 DISC2
S205 DISC1
S208 CD BLANK SKIP
DBS DIRECT PLAY 1~3
C KEY C.B
FROM B FRONT C.B CN101
CN3
S101 OPEN/CLOSE
S102 DISC CHANGE


A MAIN C.B
B FRONT C.B
C KEY C.B
FL201
6-BT-303GNK
(DISPLAY)
IC1
μPD78044HGF
MICRO CONTROLLER
CN301
CN302
CN303
CN304
CN305
CN1
CN2
CN101
CN3
FROM STEREO RECEIVER CN903
TO CD MECHANISM AZG-1 ZD3RNDM
CD-L
A-GND
CD-R
+VM
MUTE
D-GND
FIL-1
FIL-2
-VFL
I/O-SERIAL
SERIAL
CD ON
D GND
R-CH
L-CH
W003
W4
W302
W303
W304
Q301
Q302
Q303
Q304
2SC3052
D1SS133
D2 MTZJ5.1B
D3 MTZJ5.1B
BLANK SKIP LEVEL SET
LED205~207
SLR-342VCT31 RED
LED203~204
SLH-56PCT31 GRN
CD BLANK SKIP
CLOCK SHIFT SW.
S201~208
EVQ11G04M
DISC 1
DISC 2
DISC 3
PLAY/PAUSE
STOP
OPEN/CLOSE
DISC CHANGE
RESET
B-SKIP
SIGNAL:
:PB

FL GRID (6-BT-303GNK) ASSIGNMENT AND ANODE CONNECTION (DX-NH2000)

GRID ASSIGNMENT



ANODE CONNECTION

	6G	5G	4G	3G	2G	1G
P1	S10	a	1a	1a	1a	1
P2	S12	b	1b	1b	1b	2
P3	S11	f	1f	1f	1f	3
P4	S13	g	1g	1g	1g	4
P5	S19	c	1c	1c	1c	5
P6	S14	e	1e	1e	1e	6
P7	S18	d	1d	1d	1d	7
P8	S15	–	–	▭	—	8
P9	S17	▷	2a	2a	2a	9
P10	S16	▯▯	2b	2b	2b	10
P11	S1	–	2f	2f	2f	11
P12	S20	–	2g	2g	2g	12
P13	S21	–	2c	2c	2c	13
P14	S2	–	2e	2e	2e	14
P15	S22	–	2d	2d	2d	15
P16	S23	–	TR	MIN	SEC	16
P17	S3	PBC	REPEAT	col	EDIT	17
P18	S4	(PBC)	(REPEAT)	PRGM	(EDIT)	18
P19	S5	–	–	(PRGM)	AI	19
P20	S6	–	–	RANDOM	(AI)	20
P21	CD BLANK SKIP	–	–	(RANDOM)	–	S24
P22	(CD BLANK SKIP)	–	–	–	–	–

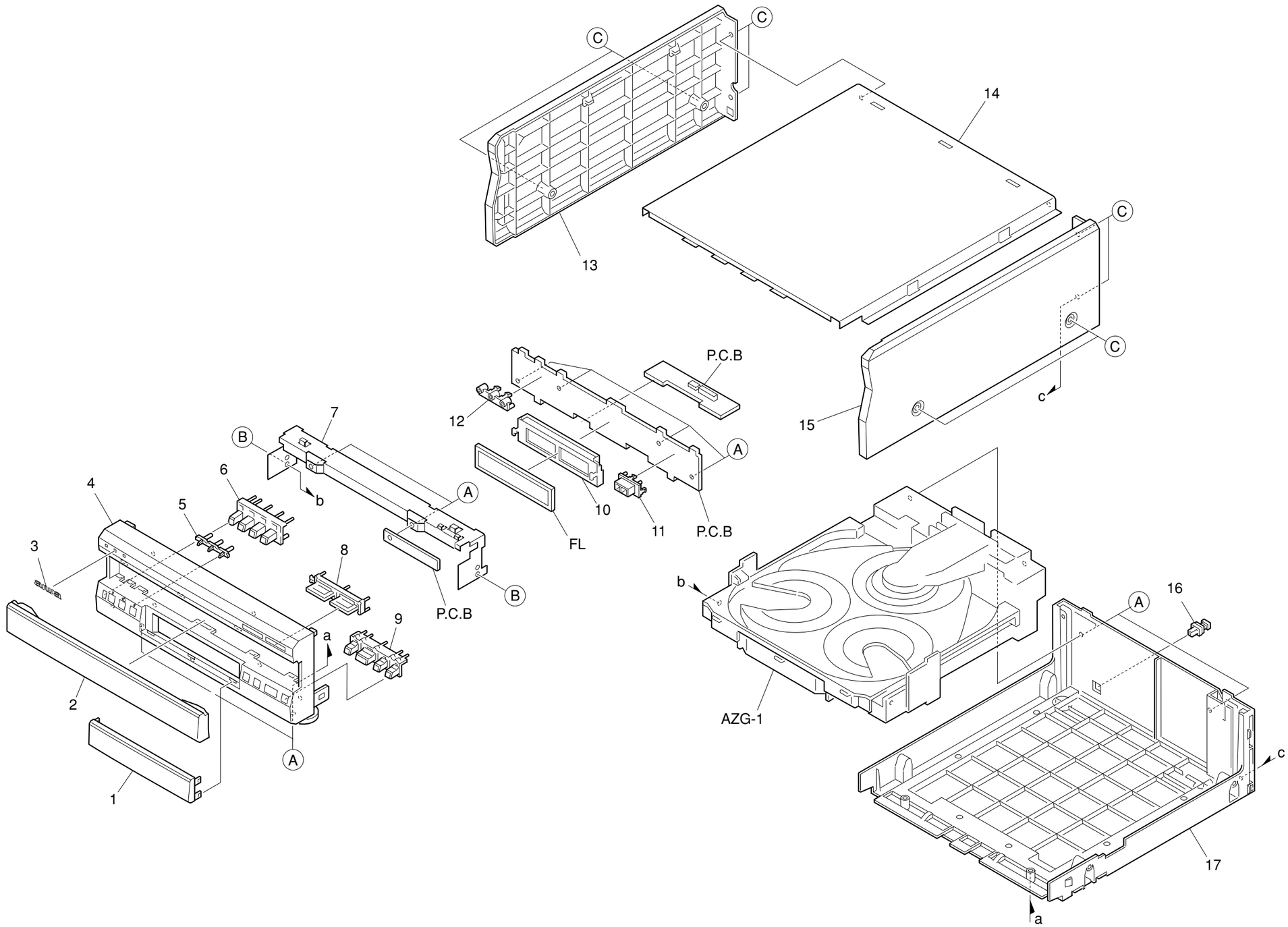
IC DESCRIPTION (DX-NH2000)

IC, UPD78044HGF

Pin No.	Pin Name	I/O	Description
1	NC	–	Not connected.
2~7	G6~G1	O	FL grid output G6~G1.
8	VDD	–	Power supply terminal.
9	O-DISH R	O	CD turntable reverse rotation output.
10	O-DISH F	O	CD turntable forward rotation output.
11	NC	–	Connected to pull-down resistor
12	I/O BUSY	I/O	DSP serial latch output.
13	I-SQCLK	I	DSP SUB Q read-out clock output.
14	O-CLK	O	CD clock output.
15	O-DATA	O	CD data output.
16	I-SQDATA	I	DSP serial data input.
17	$\overline{\text{RESET}}$	I	Reset input.
18	O-OPEN	O	CD tray open output.
19	O-CLOSE	O	CD tray close output.
20	A VSS	–	GND.
21	I-WRQ	I	CD WRQ input.
22	I-SW	I	CD motor key switch A/D input.
23	I-DISH S	I	CD turntable photo sensor A/D input.
24	B-SKIP	I	BLANK SKIP A/D input.
25	I-KEY1	I	Key1 A/D input.
26	I-KEY2	I	Key2 A/D input.
27	NC	–	Not connected.
28	NC	–	Not connected.
29	A VDD	–	Power supply terminal.
30	A VREF	–	Power supply terminal.
31	XT1	–	Connect to GND.
32	XT2	–	Connect to GND.
33	VSS	–	GND.
34	X1	–	4.19MHz oscillator circuit.
35	X2		
36	O-SHIFT	O	Micro controller clock shift output. (Shift when "L").
37	CD ON	O	Power supply output for CD circuit ("H": ON).
38	$\overline{\text{LED 2}}$	O	Play LED output.
39	$\overline{\text{LED 1}}$	O	Pause LED output.
40	NC	–	Not connected.
41	O-MUTE	O	CD Audio mute output.
42	NC	–	Connected to pull-down resistor.
43	I/O-SERIAL	I/O	Serial data input / output.
44~46	NC	–	Connected to pull-down resistor.
47,48	IC	–	Connect to GND.
49	$\overline{\text{LED4}}$	O	Disc1 LED output.
50	$\overline{\text{LED5}}$	O	Disc2 LED output.

Pin No.	Pin Name	I/O	Description
51	$\overline{\text{LED6}}$	O	Disc3 LED output.
52	VDD	–	Power supply terminal.
53	NC	–	Connected to pull-down resistor.
54	NC	–	Connected to pull-down resistor.
55	P22	O	FL segment output P22.
56	P19	O	FL segment output P19.
57	P18	O	FL segment output P18.
58	P17	O	FL segment output P17.
59	P16	O	FL segment output P16.
60	P15	O	FL segment output P15.
61	P20	O	FL segment output P20.
62	P21	O	FL segment output P21.
63	P9	O	FL segment output P9.
64	P10	O	FL segment output P10.
65	P11	O	FL segment output P11.
66	P12	O	FL segment output P12.
67	P13	O	FL segment output P13.
68	P14	O	FL segment output P14.
69, 70, 72~77	P8~P1	O	FL segment output P8~P1.
71	-VFL	–	FL display negative supply terminal.
78~80	NC	–	Not connected.

MECHANICAL EXPLODED VIEW 1 / 1 (DX-NH2000)



MECHANICAL PARTS LIST 1 / 1 (DX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SX1-003-010		WINDOW,CD
2	8A-SX1-002-010		PANEL,TRAY
3	87-CE3-023-010		BADGE,AIWA 30N SILV
4	8A-SX1-001-010		CABI,FR
5	8Z-SX1-009-010		REFLECTOR,DISC
6	8Z-SX1-005-010		KEY,DISC
7	8Z-SX1-201-110		HLDR,CD
8	8A-SX1-004-010		KEY,OPEN
9	8Z-SX1-008-010		KEY,ASSY OPE
10	88-SX1-203-210		GUIDE,FL
11	8Z-SX1-202-110		GUIDE,LED OPE
12	8Z-SX1-203-110		GUIDE,LED DISC
13	8A-SX1-011-010		PANEL,SIDE L
14	8A-SX1-013-010		CABI,STEEL
15	8A-SX1-012-010		PANEL,SIDE R
16	84-ZG1-245-210		CAP,OPTICAL
17	8A-SX1-017-010		CABI,REAR YSM
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-721-097-410		QT2+3-12 W/O SLOT
C	87-B10-091-010		UTT2+3-10 W/O SLOT BLK

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

MODEL NO.

FX-NH2000

ELECTRICAL MAIN PARTS LIST

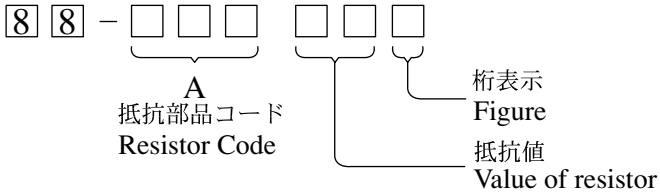
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-455-010		IC,HA12211
	87-A20-355-010		IC,CXA1553P
	8Z-SW1-609-040		C-IC,M38503M4-094FP T4
	87-020-454-010		IC,DN6851
TRANSISTOR			
	87-A30-087-080		C-FET,2SK2158
	87-A30-074-080		C-TR,RT1P 141C
	87-026-610-080		TR,KTC3198GR
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-076-080		C-TR,2SC3052F
	89-112-965-080		TR,2SA1296 (0.75W)
	87-A30-085-070		C-TR,CSA1362GR
	89-318-155-080		TR,2SC1815GR
	89-332-665-080		TR,2SC3266GR
	87-026-263-080		C-TR,RN1410
	87-A30-071-080		C-TR,RT1N 144C
	87-026-463-080		TR,2SA933SRS
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-269-080		C-DIODE,MC2836
	87-017-931-080		ZENER,MTZJ5.6B
MAIN C.B			
C301	87-010-318-080		C-CAP,S 47P-50 CH
C302	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-145-080		CAP, CHIP S 270P CH
C306	87-012-145-080		CAP, CHIP S 270P CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022
C312	87-010-198-080		CAP, CHIP 0.022
C313	87-010-180-080		C-CER 1500P
C314	87-010-180-080		C-CER 1500P
C315	87-010-178-080		CHIP CAP 1000P
C316	87-010-178-080		CHIP CAP 1000P
C317	87-012-142-080		CAP, S 0.33-16
C318	87-012-142-080		CAP, S 0.33-16
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		C-CAP,S 560P-50 J SL
C355	87-010-178-080		C-CAP,S 1000P-50 K B
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C363	87-A10-292-080		CAP,M 5600P-50 J
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C371	87-010-179-080		CAP,CHIP S B1200P
C372	87-010-179-080		CAP,CHIP S B1200P
C373	87-010-179-080		CAP,CHIP S B1200P
C374	87-010-179-080		CAP,CHIP S B1200P
C375	87-010-545-080		CAP, ELECT 0.22-50V
C376	87-010-545-080		CAP, ELECT 0.22-50V
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-403-080		CAP, ELECT 3.3-50V
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C399	87-010-197-080		C-CAP,S 0.01-25 K B
C601	87-015-997-090		CAP,E 2200-16 SME
C602	87-010-381-080		CAP, ELECT 330-16V
C603	87-010-101-080		CAP, ELECT 220-16
C604	87-010-237-080		CAP, ELECT 1000-16V
C605	87-010-198-080		CAP, CHIP 0.022
C606	87-010-404-080		CAP, ELECT 4.7-50V
C607	87-010-263-080		CAP, ELECT 100-10V
C609	87-010-196-080		CHIP CAPACITOR,0.1-25
C610	87-010-318-080		C-CAP,S 47P-50 CH
C611	87-010-312-080		C-CAP,S 15P-50 CH
C612	87-010-315-080		C-CAP,S 27P-50 CH
C613	87-010-404-080		CAP, ELECT 4.7-50V
C614	87-010-197-080		CAP, CHIP 0.01 DM
C621	87-010-197-080		CAP, CHIP 0.01 DM
CN301	87-049-919-010		CONN,3P EH V WHT
CN501	87-099-750-010		CONN,15P V 9604SC
CN702	87-A60-062-010		CONN,05P V 9604S-05C
CN704	87-A60-060-010		CONN,07P V 9604S-07C
FB301	87-008-372-080		FILTER, EMI BL OIRNI
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FB602	87-008-372-080		FILTER, EMI BL OIRNI
FB603	87-008-372-080		FILTER, EMI BL OIRNI
FB604	87-A90-923-010		F-BEAD,18-13-14 E1314MRT
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L601	87-005-130-080		COIL,10UH
L603	87-005-130-080		COIL,10UH
L801	87-003-102-080		COIL,10 UH J LAL02
PIN301	87-099-827-010		CONN,3P S2M-3W
PIN351	87-099-832-010		CONN,8P S2M-8W
SFR301	87-024-355-080		SFR,33K DIA6 H
SFR302	87-024-355-080		SFR,33K DIA6 H
SFR303	87-024-355-080		SFR,33K DIA6 H
SFR304	87-024-355-080		SFR,33K DIA6 H
SFR305	87-024-356-080		SFR,47K DIA6 H
SFR306	87-024-356-080		SFR,47K DIA6 H
SFR351	87-024-356-080		SFR,47K DIA6 H
SFR352	87-024-356-080		SFR,47K DIA6 H
W501	88-915-161-110		FF-CABLE,15P 1.25
W601	88-SW1-607-010		CORD,FG9P
X601	87-A70-120-080		VIB,8.00MHZ MTZ-TF01
FRONT 1 C.B.			

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN701	87-A60-062-010		CONN,05P V 9604S-05C
D701	87-070-278-010		LED,SLZ-738A-24S PGRN
D702	87-002-787-080		LED,SEL 6215S RED
S701	87-A90-095-080		SW,TACT EVQ11G04M
S702	87-A90-095-080		SW,TACT EVQ11G04M
S703	87-A90-095-080		SW,TACT EVQ11G04M
S704	87-A90-095-080		SW,TACT EVQ11G04M
W701	88-905-331-110		FF-CABLE,5P 1.25 330MM
FRONT 2 C.B			
CN703	87-A60-060-010		CONN,07P V 9604S-07C
D711	87-A40-496-040		LED,SLR-342PCT31 GRN
D712	87-A40-496-040		LED,SLR-342PCT31 GRN
D713	87-A40-496-040		LED,SLR-342PCT31 GRN
D714	87-070-278-010		LED,SLZ-738A-24-S
S711	87-A90-095-080		SW,TACT EVQ11G04M
S712	87-A90-095-080		SW,TACT EVQ11G04M
S713	87-A90-095-080		SW,TACT EVQ11G04M
S714	87-A90-095-080		SW,TACT EVQ11G04M
S715	87-A90-095-080		SW,TACT EVQ11G04M
W702	88-907-301-110		FF-CABLE, 7P 1.25

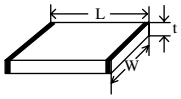
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
DECK C.B			
CN502	87-099-756-010		CONN,15P 9604 S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-010		SOL ASSY, 27
SOL2	82-ZM1-618-010		SOL ASSY, 27
SW1	87-A90-248-010		SW,MICROESE11SH2CXQ
SW2	87-A90-248-010		SW,MICROESE11SH2CXQ
SW3	87-A90-248-010		SW,MICROESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-036-110-010		SW,MICRO SPPB62
W1	82-ZM3-601-010		RBN,CORD 4P-75
HEAD-1 C.B			
HEAD-2 C.B			

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

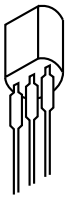
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



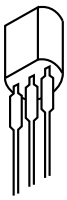
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

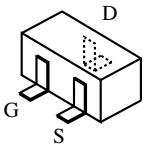
TRANSISTOR ILLUSTRATION (FX-NH2000)



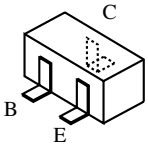
2SC1815GR
2SC3266GR
KTC3198GR



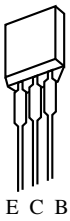
2SA1296



2SK2158



2SC3052
CSA1362
RN1410
RT1N141C
RT1N144C
RT1P141C

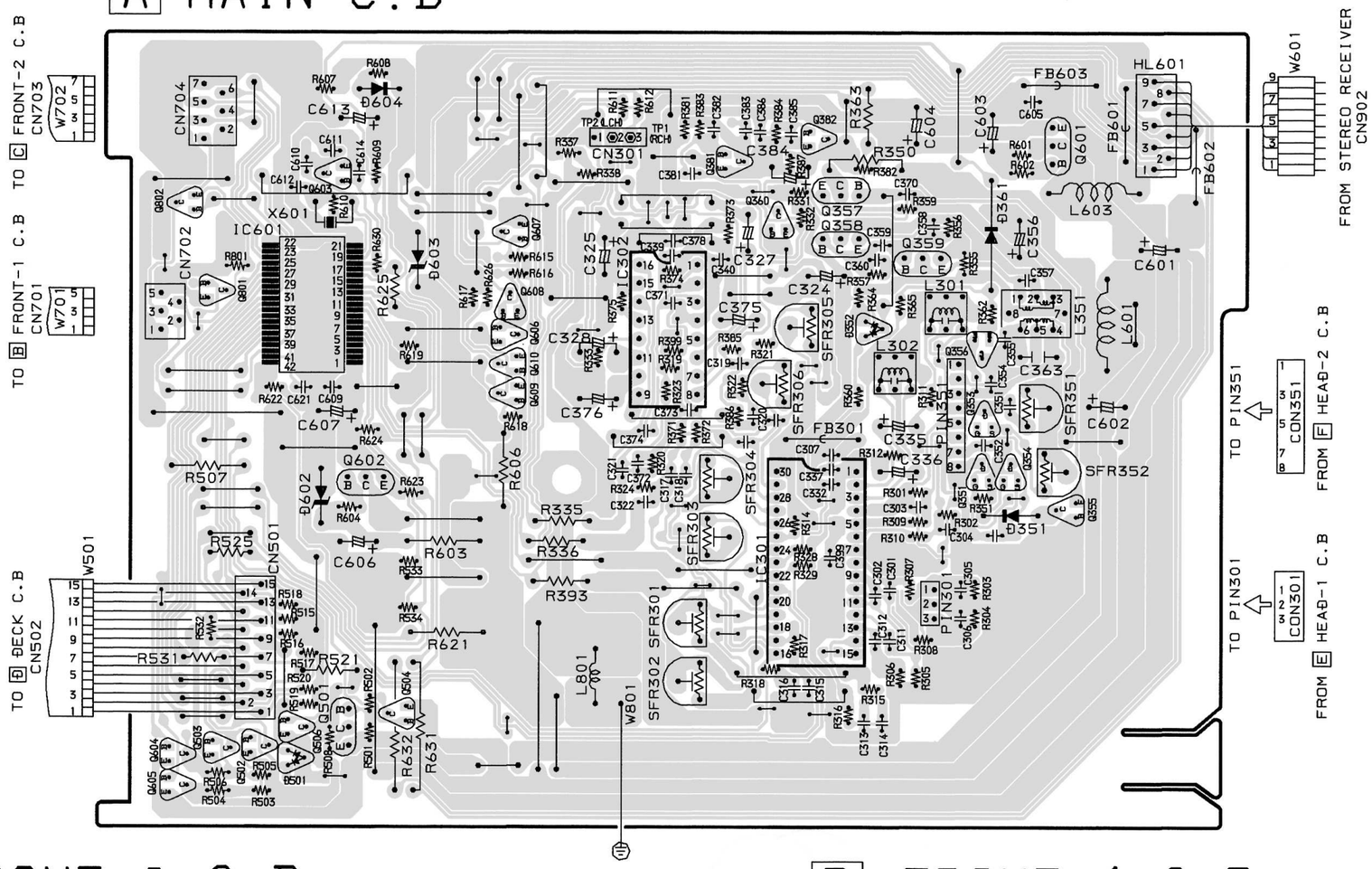


2SA933SRS

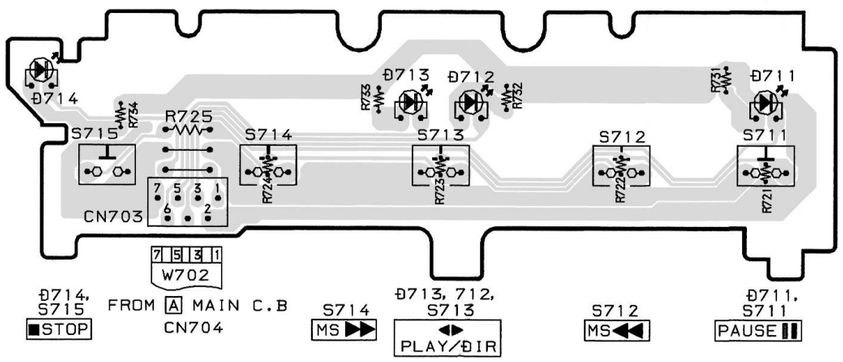
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

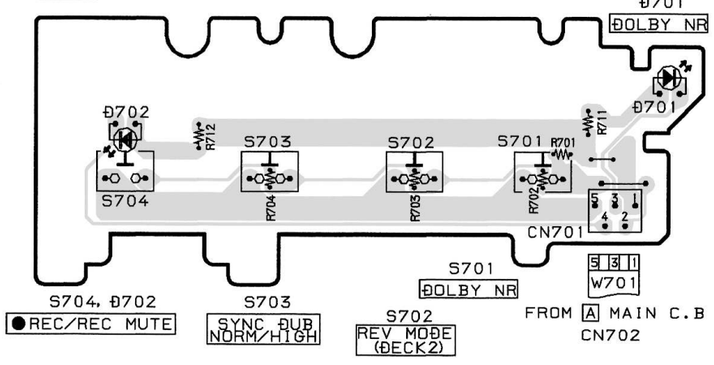
A MAIN C.B



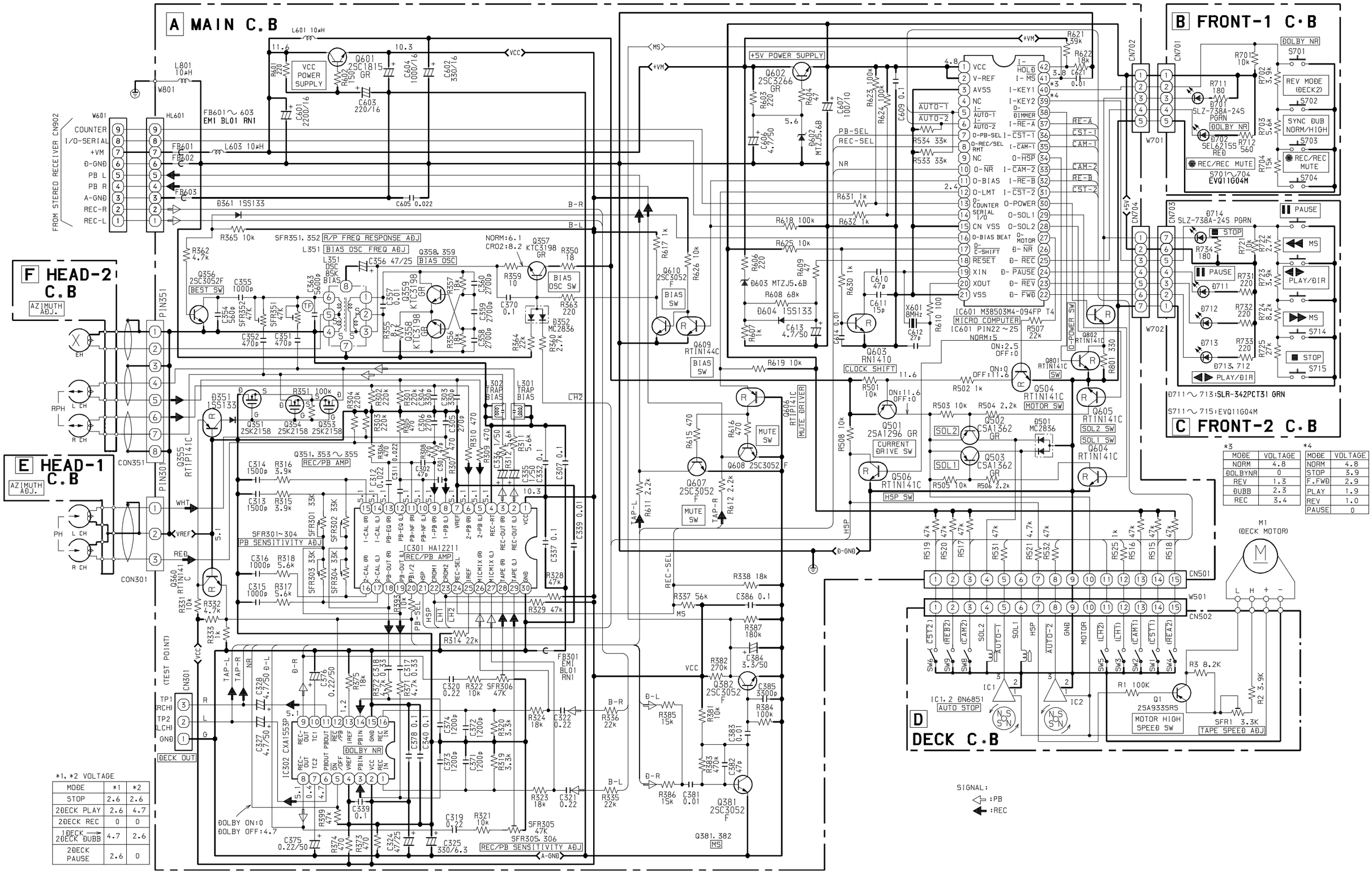
C FRONT-2 C.B



B FRONT-1 C.B



SCHEMATIC DIAGRAM (MAIN / FRONT-1 / FRONT-2 / DECK : FX-NH2000)



*1, *2 VOLTAGE

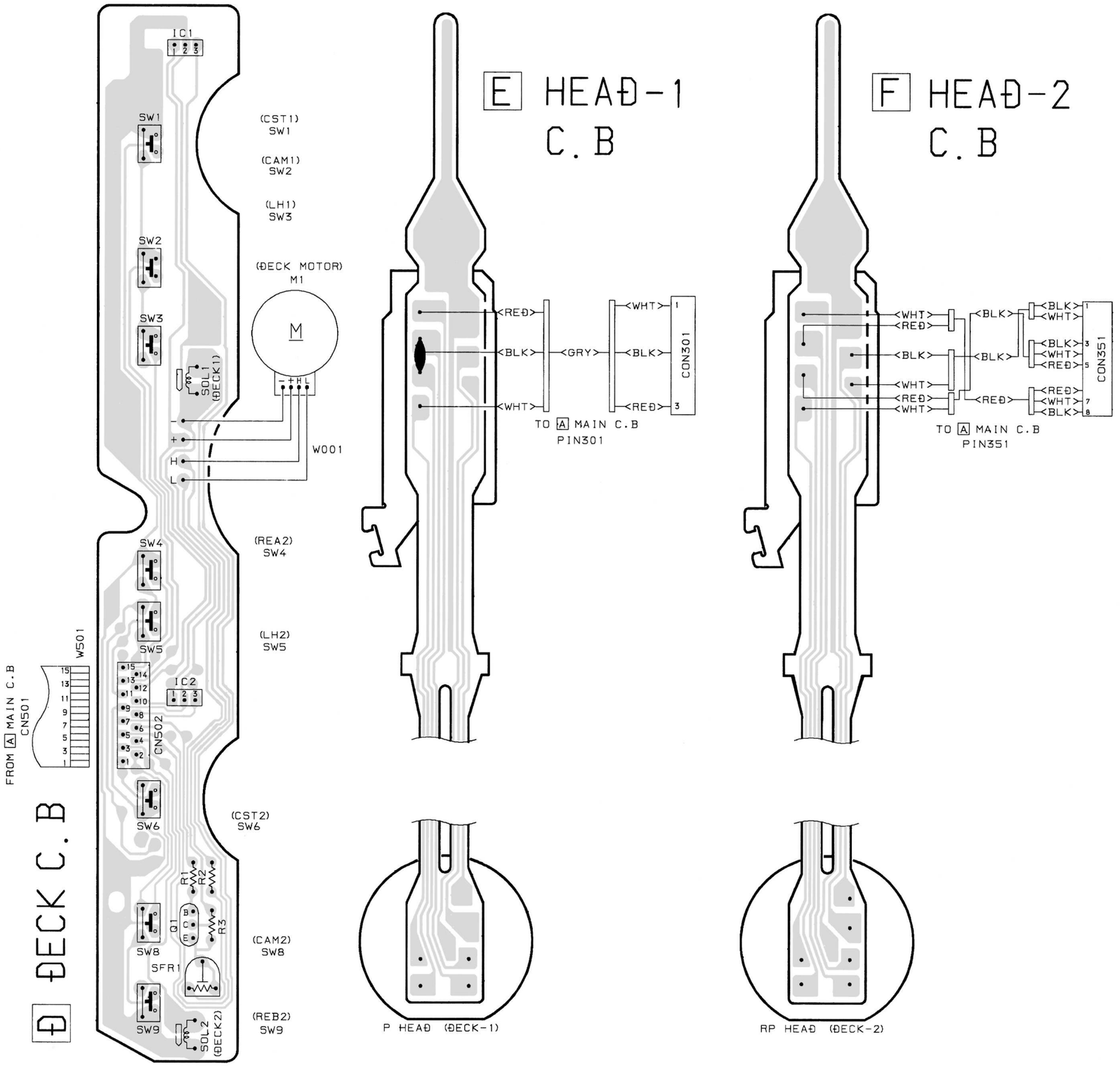
MODE	*1	*2
STOP	2.6	2.6
2DECK PLAY	2.6	4.7
2DECK REC	0	0
1DECK → 2DECK DUBB	4.7	2.6
2DECK PAUSE	2.6	0

*3

MODE	VOLTAGE
NORM	4.8
DOLBYNR	0
REV	1.3
DUBB	2.3
REC	3.4

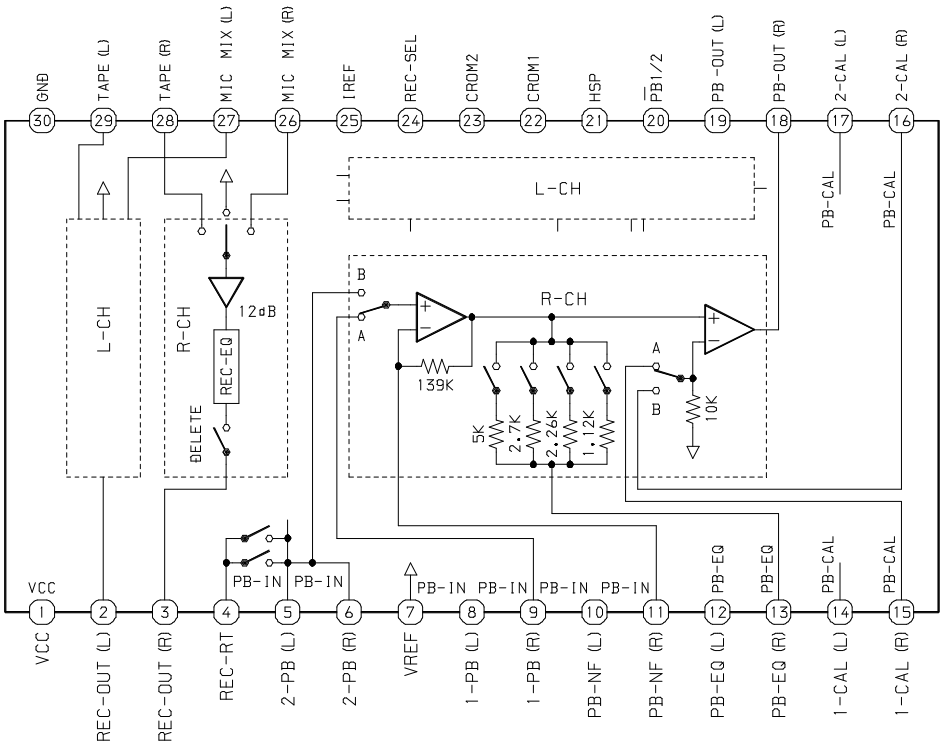
*4

MODE	VOLTAGE
NORM	4.8
STOP	3.9
F.FWD	2.9
PLAY	1.9
REV	1.0
PAUSE	0

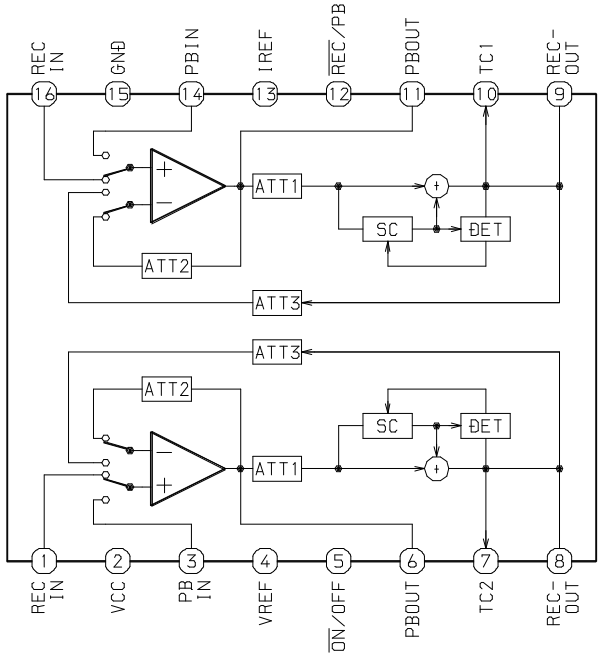

D DECK C.B
IC1
SW1
(CST1) SW1
(CAM1) SW2
(LH1) SW3
SW2
SW3
(DECK MOTOR) M1
M
SOL1 (DECK1)
W001
SW4
(REA2) SW4
SW5
(LH2) SW5
W501
FROM A MAIN C.B CN501
IC2
CN502
SW6
(CST2) SW6
R1
R2
R3
Q1
SW8
(CAM2) SW8
SFR1
SW9
(REB2) SW9
SOL2 (DECK2)
E HEAD-1 C.B
RED
BLK
WHT
GRY
CON301
TO A MAIN C.B PIN301
F HEAD-2 C.B
CON351
TO A MAIN C.B PIN351
P HEAD (DECK-1)
RP HEAD (DECK-2)

IC BLOCK DIAGRAM (FX-NH2000)

IC, HA12211



IC, CXA1553P



ATT:Attenuator
SC:Side Chain
DET:Detector

IC DESCRIPTION (FX-NH2000)

IC, M38503M4-094FP T4

Pin No.	Pin Name	I/O	Description
1	VCC	–	IC power supply.
2	V-REF	–	Connected to VCC.
3	AVSS	–	Connected to GND.
4	NC	–	Not connected.
5	I-$\overline{\text{AUTO-1}}$	I	Input of DECK 1 reel platform pulse.
6	I-$\overline{\text{AUTO-2}}$	I	Input of DECK 2 reel platform pulse.
7	O-PB-SEL	O	Three-state output.
8	O-REC-SEL		
9	NC	–	Not connected.
10	O-$\overline{\text{NR}}$	O	When NR is ON: “L”.
11	O-BIAS	O	BIAS control.
12	O-LMT	O	Output LINE MUTE. When MUTE: “H”.
13	O-COUNTER	O	Output tape counter data.
14	SERIAL I/O	I/O	Serial I/O terminal.
15	CN VSS	–	Connected to GND.
16	O-BIAS BEAT	O	For bias beat changeover. When in operation: “H”. Initial: “L”. (Not used)
17	$\overline{\text{O-C SHIFT}}$	O	While clock shift: “L” .
18	$\overline{\text{RESET}}$	I	RESET signal input pin.
19	XIN	I	Crystal oscillation pin.
20	XOUT	O	Crystal oscillation pin.
21	VSS	–	Connected to GND.
22	D-$\overline{\text{FWD}}$	O	When Power is ON: “L” under STOP status. When FWD operates: flashing (“L” ↔ “H” repeated). While FF: fast flashing.
23	D-$\overline{\text{REV}}$	O	When Power is ON: “L” under STOP status. When RVS operates: flashing (“L” ↔ “H” repeated). While REW: fast flashing.
24	D-$\overline{\text{PAUSE}}$	O	When Power is ON: “L” under STOP status. While PAUSE: flashing (“L” ↔ “H” repeated).
25	D-$\overline{\text{REC}}$	O	While REC, DUBBING: “L”. While REC, MUTE: flashing.
26	D-$\overline{\text{NR}}$	O	When NR is ON: “L”. (Not used)
27	O-MOTOR	O	When MOTOR is in operation or power on (500msec): “H”.
28	O-SOL2	O	When DECK 2 solenoid is in operation: “H”.
29	O-SOL1	O	When DECK 1 solenoid is in operation: “H”.
30	O-POWER	O	When POWER of MX-NH2000 is ON: “H” .
31	I-$\overline{\text{CST-2}}$	I	DECK 2 cassette detection. When cassette exists: “L”.
32	I-$\overline{\text{RE-B}}$	I	DECK 2 side B REC enable. When recordable: “L”.
33	I-$\overline{\text{CAM-2}}$	I	DECK 2 cam. When switch is ON: “L”.
34	O-$\overline{\text{HSP}}$	O	Output high speed signal. High speed: “L”.
35	I-$\overline{\text{CAM-1}}$	I	DECK 1 mechanism cam. When switch is ON: “L”.
36	I-$\overline{\text{CST-1}}$	I	DECK 1 cassette detection. When cassette exists:“L”.
37	I-$\overline{\text{RE-A}}$	I	DECK 2 side A REC enable. When recordable: “L”

Three-state output.

	O-REC-SEL	O-PB-SEL
L	TAPE	DECK 2 REC
H	REC IN	DECK 2 PB
H1-Z	REC MUTE	DECK 1 PB

Pin No.	Pin Name	I/O	Description
38	O-$\overline{\text{DIMMER}}$	O	Ordinarily “H”. When MX-NH2000 is in DIMMER 1 or 2 mode: “L”.
39	I-KEY2	I	KEY input 2. AD input.
40	I-KEY1	I	KEY input 1. AD input.
41	I-$\overline{\text{MS}}$	I	MS input. AD input.
42	I-$\overline{\text{HOLD}}$	I	System power supply monitor. AD input.

*P1Ns 22, 23, 24, 25, and 26 should be “H” when MX-NH2000 is in DIMMER 2 mode.

ADJUSTMENT <DECK> (FX-NH2000)

< DECK SECTION >

1. Tape Normal Speed Adjustment
   Settings : • Test tape : TTA–100 (Tape center)
   • Test point : TP1 (Rch), TP2 (Lch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the test point becomes 3000Hz ± 5Hz(FWD) Then check REV speed is 3000Hz ± 45Hz.

2. High Speed Check
   Settings : • Test tape : TTA–100 (Tape center)
   • Test point : TP1 (Rch), TP2 (Lch)
   Method : After normal speed adjustment, play back (High speed) the test tape. Then check tape speed is 6000Hz ±400Hz (FWD).

3. Head Azimuth Adjustment
   Settings : • Test tape : TTA–300
   • Test point : TP1(Rch), TP2 (Lch)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum.Next, perform on each FWD PLAY and REV PLAY mode.

4 PB Sensitivity Adjustment (DECK1, DECK2)
   Settings : • Test tape : TTA–200
   • Test point : TP1 (Rch), TP2 (Lch)
   • Adjustment location : SFR301 (DECK1, Lch)
   SFR302 (DECK1, Rch)
   SFR303 (DECK2, Lch)
   SFR304 (DECK2, Rch)
   Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 245mV (DECK2), 260mV (DECK1).

5. PB Frequency Response Check (DECK1, DECK2)
   Settings : • Test tape : TTA–300
   • Test point : TP1 (Rch), TP2 (Lch)
   Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is 0dB .
   Next, check that the Lch and Rch difference level of 10kHz signal is less than 2dB.

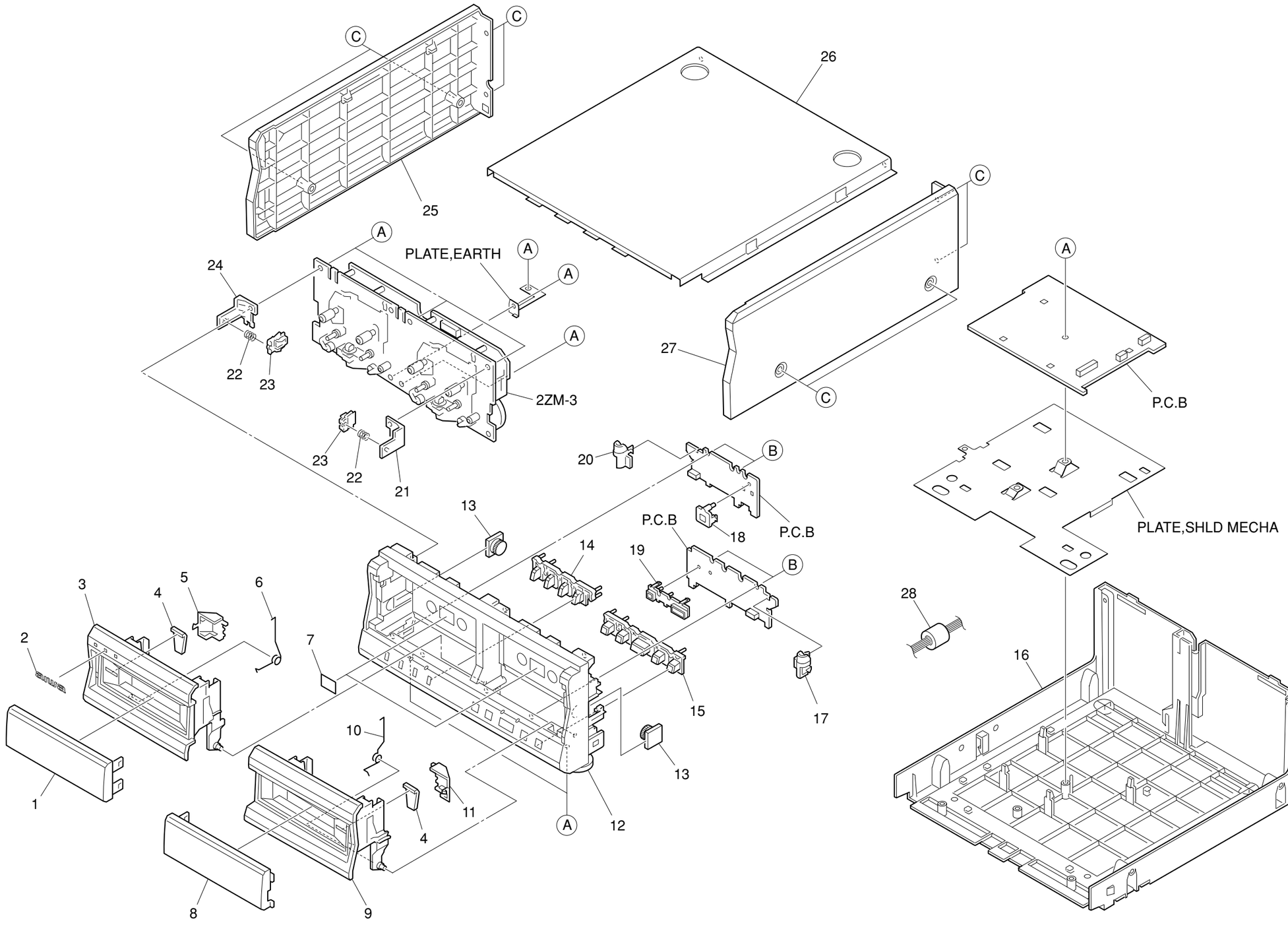
6. REC/PB Sensitivity Adjustment (DECK2)
   Settings : • Test tape : TTA–602 (NORMAL)
   • Test point : TP1 (Rch), TP2 (Lch)
   • Input signal : 1kHz (LINE IN)
   • Adjustment location : SFR305 (Lch)
   SFR306 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz signals and adjust SFRs so that the output is 0dB ± 0.5dB.

7. REC/PB Frequency Response Adjustment (DECK2)
   Settings : • Test tape : TTA–602 (NORMAL)
   • Test point : TP2 (Lch), TP1 (Rch)
   • Input signal : 1kHz / 10kHz (LINE IN)
   • Adjustment location : SFR351 (Lch)
   SFR352 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

8. REC/PB Frequency Response Check (DECK2)
   Settings : • Test tape : TTA–615 (CrO2)
   • Test point : TP2 (Lch), TP1 (Rch)
   • Input signal : 1kHz
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz signal and check that the output is 0dB ± 2.0dB.

9. REC/PB Sensitivity Check (DECK2)
   Settings : • Test tape : TTA–615 (CrO2)
   • Test point : TP2 (Lch), TP1 (Rch)
   • Input signal : 1kHz (LINE OUT)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 170mV. Record and play back the 1kHz signal and check that the output is 0dB ± 2.0dB.

MECHANICAL EXPLODED VIEW 1 / 1 (FX-NH2000)



MECHANICAL PARTS LIST 1 / 1 (FX-NH2000)

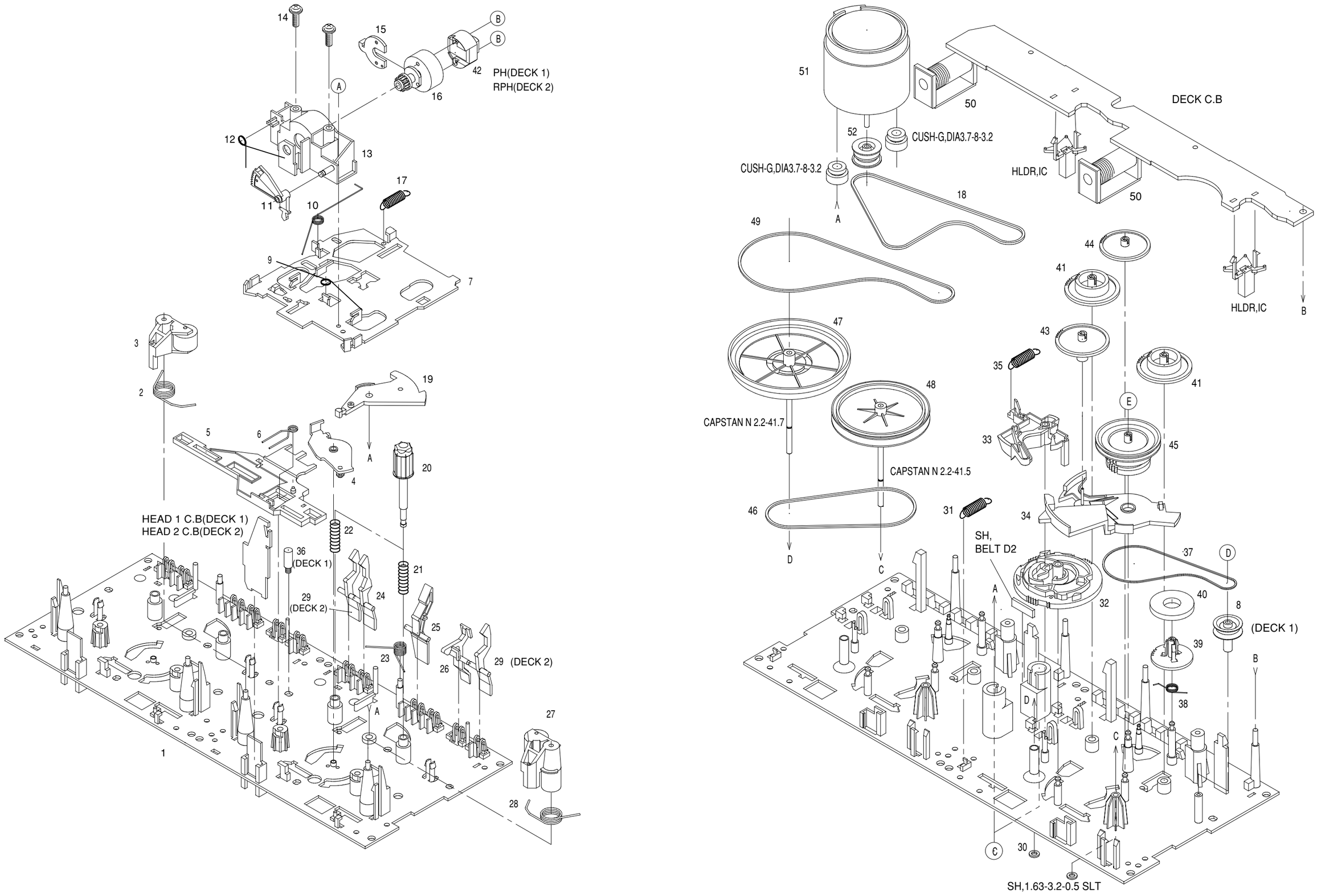
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-SW1-004-010		WINDOW,CASS 1
2	87-CE3-023-010		BADGE,AIWA 30N SILV
3	8A-SW1-002-010		BOX,CASS 1
4	8Z-SW1-013-010		REFLECTOR,CASS 1
5	8Z-SW1-201-010		COVER, REFLECTOR 1
6	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
7	81-532-080-010		LABEL, CASS. COMPT
8	8A-SW1-005-010		WINDOW,CASS 2
9	8A-SW1-003-010		BOX,CASS 2
10	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
11	8Z-SW1-202-010		COVER, REFLECTOR 2
12	8A-SW1-001-010		CABI,FR
13	87-NF8-220-010		DMPR,150
14	8A-SW1-011-010		KEY,ASSY REC
15	8Z-SW1-012-010		KEY,ASSY OPE
16	8A-SW1-018-010		CABI,REAR YSM
17	8Z-SW1-206-110		GUIDE,LED CASS 2
18	8Z-SW1-204-110		GUIDE,LED REC
19	8Z-SW1-203-110		GUIDE, LED OPE
20	8Z-SW1-205-110		GUIDE,LED CASS 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
21	87-NF4-217-110		HLDR,LOCK 2
22	86-NF9-224-010		SPR-C,LOCK
23	82-NF5-229-010		PLATE,LOCK
24	87-NF4-216-010		HLDR,LOCK 1
25	8A-SW1-016-010		PANEL,SIDE L
26	8A-SW1-015-010		CABI,STEEL
27	8A-SW1-017-010		PANEL,SIDE R
28	87-A90-923-010		F-BEAD, 8-13-14E1314
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-067-579-010		BVT2+3-8 W/O SLOT
C	87-B10-091-010		UTT2+3-10 W/O SLOT BLK

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

TAPE MECHANISM EXPLODED VIEW 1 / 1 (FX-NH2000)



TAPE MECHANISM PART LIST 1 / 1 (FX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-610	1H	CHAS ASSY,M2
2	82-ZM1-258-210	0E	SPR-T,PINCH L
3	82-ZM1-341-210	1A	LVR ASSY,PINCH L2
4	82-ZM1-333-210	0E	PLATE,LINK2
5	82-ZM1-266-310	0E	LVR,DIR
6	82-ZM1-214-010	0E	SPR-T,DIR
7	82-ZM1-206-910	1A	CHAS,HEAD
8	82-ZM3-335-310	0E	PULLEY,COUPLER M3
9	82-ZM1-269-210	0E	SPR-T,BRG
10	82-ZM1-219-110	0E	SPR-T,LINK
11	82-ZM1-210-110	0E	GEAR,H T
12	82-ZM1-213-010	0E	SPR-T,HEAD
13	82-ZM1-207-910	1A	GUIDE,TAPE
14	86-ZM4-206-010	0E	S-SCREW,AZIMUTH L
15	82-ZM1-314-110	0E	PLATE,HEAD
16	82-ZM1-208-310	0E	HLDR,HEAD
17	82-ZM1-218-010	0E	SPR-E,HB
18	82-ZM3-342-010	0E	BELT,SBU MOT 3
19	82-ZM1-222-210	0E	LVR,PLAY
20	82-ZM1-217-410	0E	REEL TABLE
21	82-ZM1-244-510	0E	SPR-C,BT
22	82-ZM1-285-410	0E	SPR-C,BT L
23	82-ZM1-257-010	0E	SPR-T,CAS
24	82-ZM1-241-310	0E	LVR,MC
25	82-ZM1-242-010	0E	LVR,CAS
26	82-ZM1-243-010	0E	LVR,STOP
27	82-ZM1-344-010	0E	LVR ASSY,PINCH R2
28	82-ZM1-259-210	0E	SPR-T,PINCH R
29	82-ZM1-240-110	0E	LVR,REC(*)
30	80-ZM6-243-010	0E	SH 1.75-3.6-0.5 SLT
31	82-ZM1-255-310	0E	SPR-E,LVR DIR
32	82-ZM3-305-210	0E	GEAR,CAM M2
33	82-ZM1-227-310	0E	LVR,TRIG
34	82-ZM3-306-110	0E	LVR,FR M2
35	82-ZM1-265-310	0E	SPR-E,TRIG
36	82-ZM3-339-110	0E	SHAFT,COUPLER N3
37	86-ZM1-206-010	0E	BELT,MAIN L
38	82-ZM1-322-010	0E	SPR-T,FR 60
39	82-ZM1-220-210	0E	GEAR,IDLER
40	82-ZM3-616-010	0E	RING MAGNET 4
41	82-ZM1-216-410	0E	GEAR,REEL
42	87-A90-820-010	1D	HEAD,PH HADKH25 FPC
42	87-A90-821-010	1H	HEAD,RPH HADKH56 FPC
43	82-ZM1-225-210	0E	GEAR,FR
44	82-ZM1-226-010	0E	GEAR,REW
45	82-ZM3-333-310	1A	SLIP DISK ASSY 2
46	82-ZM1-338-110	0E	BELT,FR 4
47	82-ZM1-349-110	1A	FLY-WHL,R W
47	82-ZM1-348-110	0E	FLY-WHL,L W
48	82-ZM3-338-310	1A	FLY-WHL,R3W
49	82-ZM3-329-410	0E	BELT,SBU R2
50	82-ZM1-618-410	1B	SOL ASSY,27
51	87-045-347-010	1H	MOT,SHU2L 70
52	82-ZM3-221-210	0E	PULLEY,MOT 2M
A	85-ZM3-202-010	0E	S-SCREW,TG
B	80-ZM6-207-010	0E	V+1.6-7
C	82-ZM3-318-110	0E	S-SCREW W,MOTOR M2
D	87-B10-043-010	0E	W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010	0E	PW 2.16-6-0.4

MODEL NO.

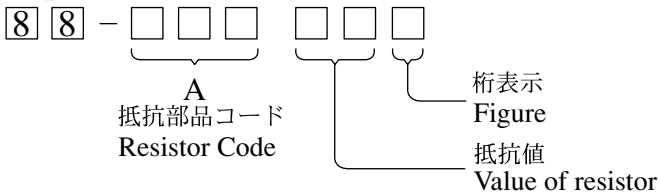
GE-NH2000

ELECTRICAL MAIN PARTS LIST

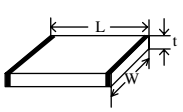
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-SU1-608-010		IC,LC866448W
	87-A21-023-040		C-IC,BA3835F
TRANSISTOR			
	87-026-263-080		C-TR,RN1410
DIODE			
	87-070-136-080		ZENER,MTZJ5.1B
	87-017-931-080		ZENER,MTZJ5.6B
	87-020-465-080		DIODE,1SS133 (110MA)
MAIN C.B			
C101	87-010-550-040		CAP,E 100-6.3 GAS
C103	87-010-497-040		CAP,E 4.7-35 GAS
C105	87-010-312-080		C-CAP,S 15P-50 CH
C106	87-010-320-080		CHIP CAP 68P
C107	87-010-316-080		C-CAP,S 33P-50 CH
C108	87-010-196-080		CHIP CAPACITOR,0.1-25
C109	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-012-368-080		C-CAP,S 0.1-50 F
C111	87-010-552-040		CAP,E 22-16 GAS
C201	87-012-140-080		CAP 470P
C202	87-012-369-080		C-CAP,S 0.047-50F
C203	87-010-404-040		CAP,E 4.7-50 SME
C204	87-010-405-040		CAP,E 10-50
C205	87-010-405-040		CAP,E 10-50
C206	87-010-405-040		CAP,E 10-50
C301	87-010-196-080		CHIP CAPACITOR,0.1-25
C302	87-010-196-080		CHIP CAPACITOR,0.1-25
C303	87-010-197-080		CAP, CHIP 0.01 DM
C304	87-010-182-080		C-CAP,S 2200P-50 B
C401	87-010-196-080		CHIP CAPACITOR,0.1-25
C402	87-010-196-080		CHIP CAPACITOR,0.1-25
C403	87-010-196-080		CHIP CAPACITOR,0.1-25
C404	87-010-196-080		CHIP CAPACITOR,0.1-25
C405	87-010-196-080		CHIP CAPACITOR,0.1-25
C406	87-010-196-080		CHIP CAPACITOR,0.1-25
C407	87-012-158-080		C-CAP,S 390P-50 CH
C408	87-A11-144-080		CAP,TC U 0.1-50 K B
FL201	8Z-SU1-605-010		FL,BJ699GK
L101	87-005-152-080		COIL,10UH
L102	87-005-130-080		COIL,10UH
L103	87-005-130-080		COIL,10UH
L104	87-005-152-080		COIL,10UH
L301	87-003-097-080		COIL,1UH
LED201	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED202	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED203	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED204	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED205	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED206	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED207	87-A40-380-080		LED,SEL6510C-TP5 GRN
LED208	87-A40-380-080		LED,SEL6510C-TP5 GRN
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M
S316	87-A91-076-010		SW,RTRY REO121PVB25FINA1
W101	8Z-SU1-608-010		CORD,52305-101BLK
WH101	87-A90-882-010		HLDR,WIRE 10P 1.5 51016
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF

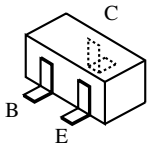
○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

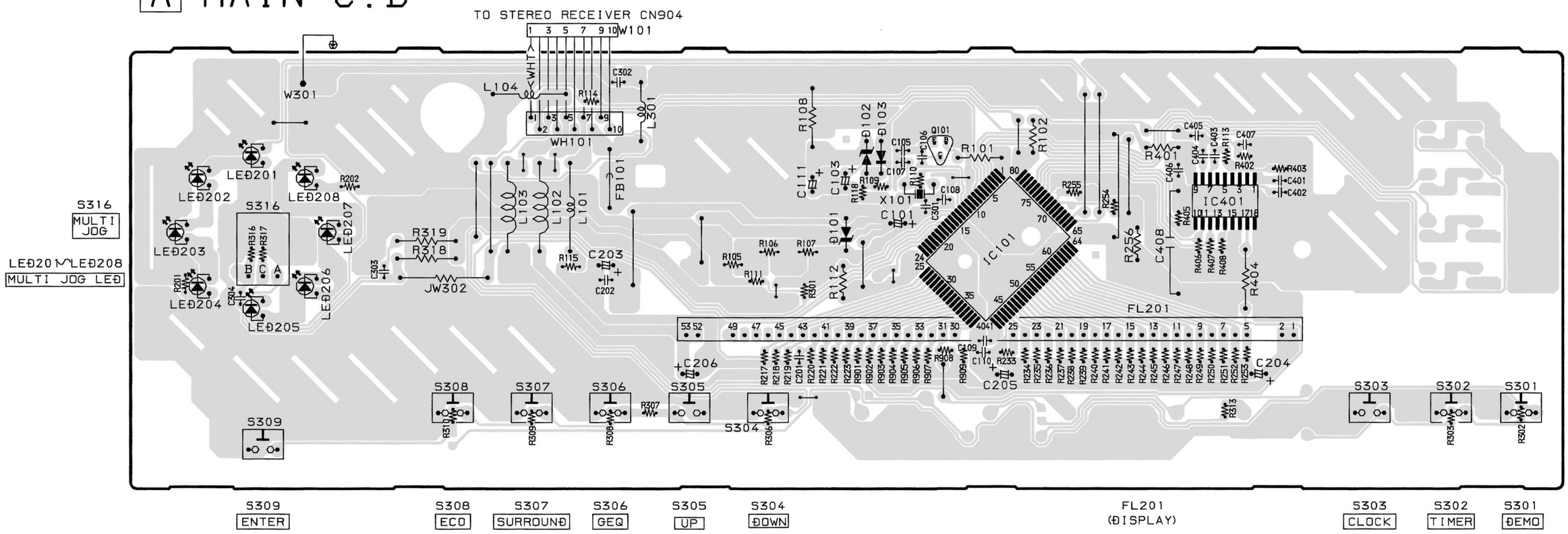


RN1410

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B



A MAIN C.B

FL201 BJ699GNK
(DISPLAY)

FROM STEREO RECEIVER CN904

W101

IC101
LC866448W
MICRO COMPUTER

IC401
BA3835F
SPECTRUM ANALYSER DRIVE IC

S301~315: EVQ11G04M

ENTER S309 · ECO S308 · SURROUND S307 · GEQ S306 · UP S305 · DOWN S304

CLOCK S303 · TIMER S302 · DEMO S301

S316 RE0121 PVB25 FINAL
MULTI JOG

CLOCK SHIFT SW

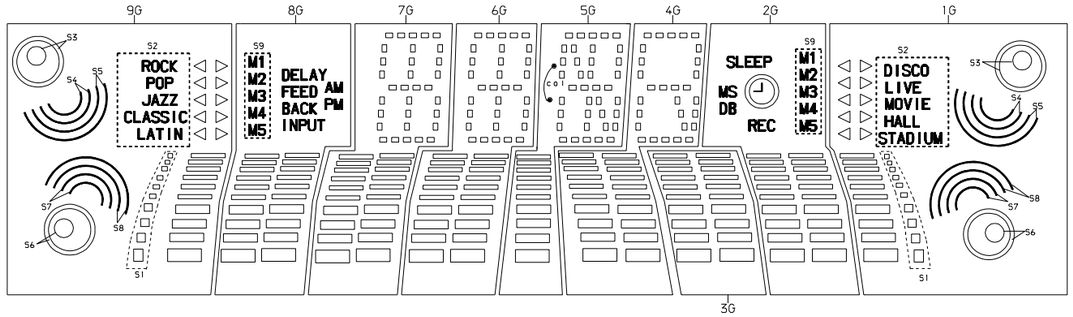
MULTI JOG LED

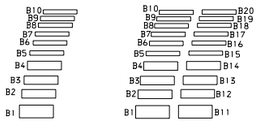
LED201~208
SEL6510C-TP5 GRN

SIGNAL:
:PB

FL GRID ASSIGNMENT AND ANODE CONNECTION (GE-NH2000)

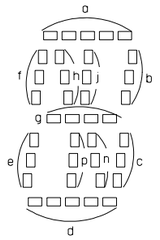
GRID ASSIGNMENT





(9G、5G、1G)

(8G~6G、4G~2G)



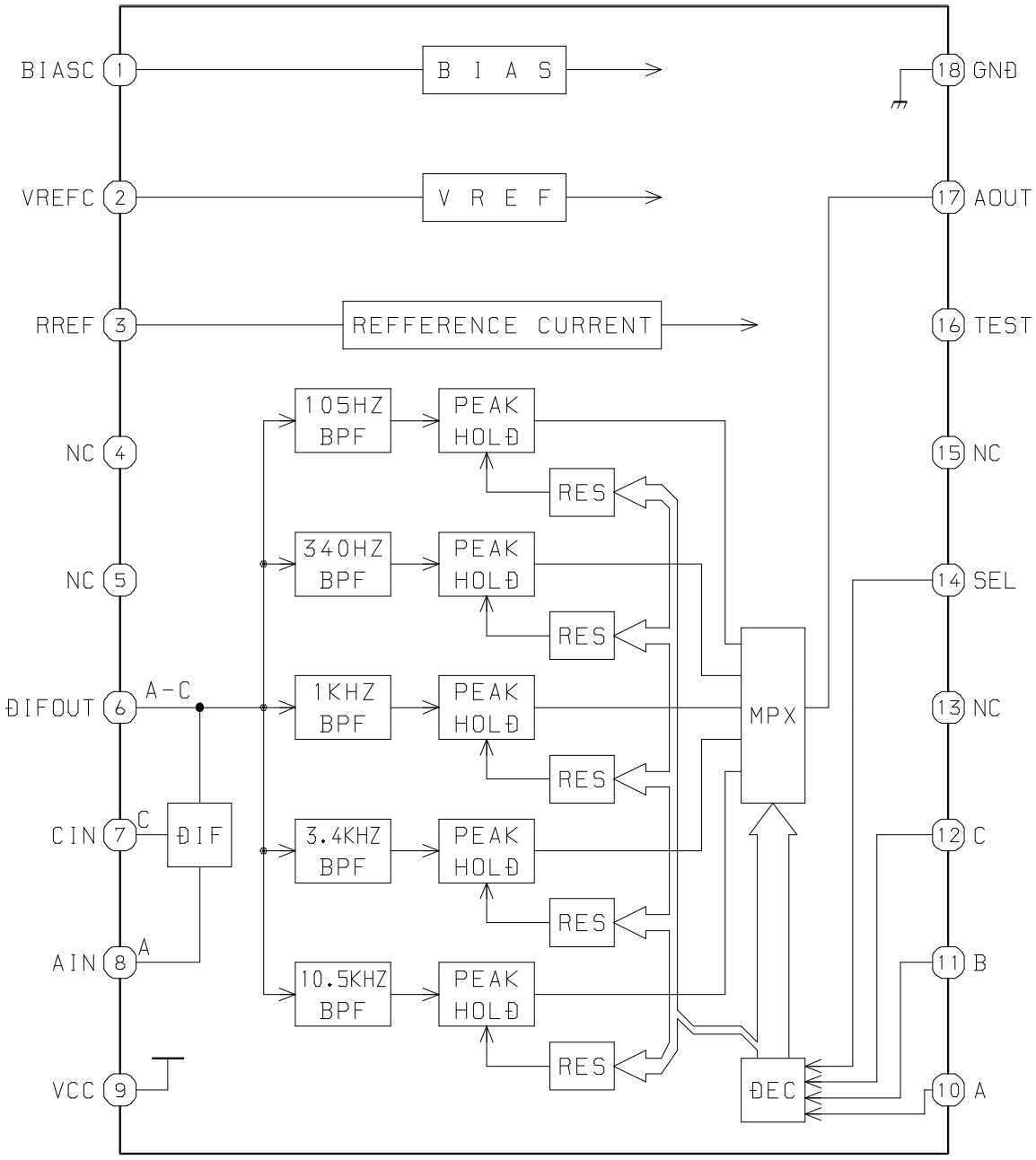
(7G~4G)

ANODE CONNECTION

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	[M1]	—	a	a	a	a	—	—	[M1]
P2	[M2]	S9	b	b	b	b	—	S9	[M2]
P3	[M3]	DELAY	f	f	f	f	—	SLEEP	[M3]
P4	[M4]	FEED BACK	g	g	g	g	—	◴	[M4]
P5	[M5]	INPUT	c	c	c	c	—	REC	[M5]
P6	[ROCK]	AM	e	e	e	e	—	MS	[DISCO]
P7	[POP]	PM	d	d	d	d	—	DB	[LIVE]
P8	S1	B11	B11	B11	h	B11	B11	B11	S1
P9	B1	B1	B1	B1	B1	B1	B1	B1	B1
P10	S6	B12	B12	n	B12	B12	B12	B12	S6
P11	B2	B2	B2	B2	B2	B2	B2	B2	B2
P12	S7	B13	B13	col(上)	B13	B13	B13	B13	S7
P13	B3	B3	B3	B3	B3	B3	B3	B3	B3
P14	S8	B14	B14	col(下)	B14	B14	B14	B14	S8
P15	B4	B4	B4	B4	B4	B4	B4	B4	B4
P16	S3	B15	B15	—	B15	B15	B15	B15	S3
P17	B5	B5	B5	B5	B5	B5	B5	B5	B5
P18	S4	B16	B16	—	B16	B16	B16	B16	S4
P19	B6	B6	B6	B6	B6	B6	B6	B6	B6
P20	S5	B17	B17	—	B17	B17	B17	B17	S5
P21	B7	B7	B7	B7	B7	B7	B7	B7	B7
P22	S2	B18	B18	—	B18	B18	B18	B18	S2
P23	B8	B8	B8	B8	B8	B8	B8	B8	B8
P24	[JAZZ]	B19	B19	—	B19	B19	B19	B19	[MOVIE]
P25	B9	B9	B9	B9	B9	B9	B9	B9	B9
P26	[CLASSIC]	B20	B20	—	B20	B20	B20	B20	[HALL]
P27	B10	B10	B10	B10	B10	B10	B10	B10	B10

IC BLOCK DIAGRAM (GE-NH2000)

IC, BA3835F

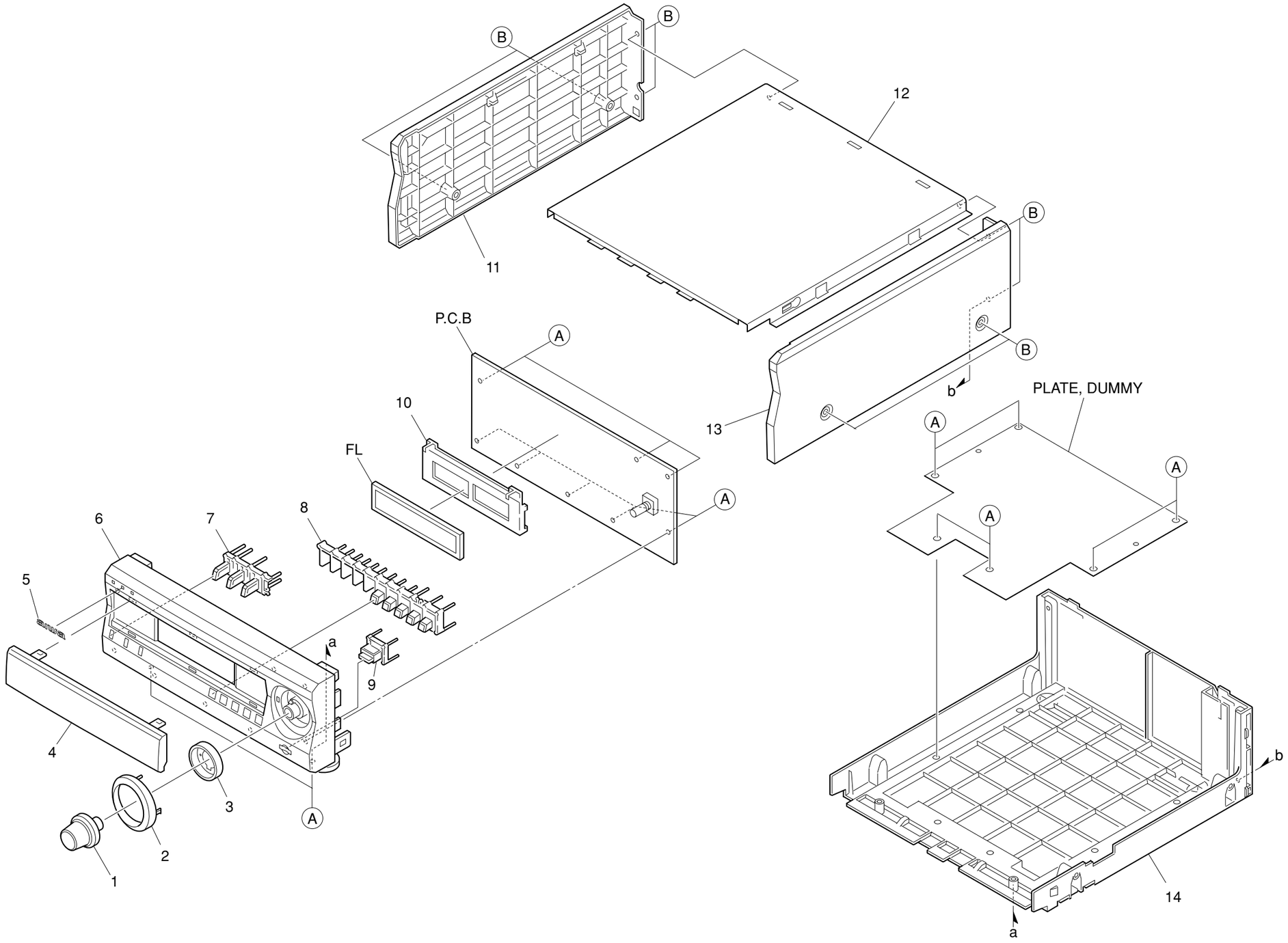


IC DESCRIPTION (GE-NH2000)

IC, LC866448W

Pin No.	Pin Name	I/O	Description
1	O-C.SHIFT	O	Micro computer clock shift output.
2	$\overline{\text{PRO LOGIC}}$	O	PRO LOGIC LED output.
3	$\overline{\text{3-STEREO}}$	O	3 STEREO LED output.
4	$\overline{\text{PHANTOM}}$	O	PHANTOM LED output.
5	$\overline{\text{NORMAL}}$	O	NORMAL LED output.
6	NC	–	Not connected.
7	$\overline{\text{RESET}}$	I	Reset input.
8	NC	–	Connected to GND.
9	NC	–	Connected to GND.
10	VSS1	–	GND.
11	CF1	–	Connected to crystal oscillator (5.76MHz).
12	CF2	–	
13	VDD1	–	Power supply.
14	I-$\overline{\text{HOLD}}$	I	System power supply monitor AD input.'H':Normal operation.'L':to stop clock and main memory.
15	I-KEY1	I	KEY 1 AD input.
16	NC	–	Connected to GND.
17	I-SPEANA	I	Spectrum analyzer level AD input.
18	NC	–	Connected to GND.
19	I-JOG	I	Jog rotary encoder input.
20~23	NC	–	Connected to GND.
24	PRO LOGIC	I	Input prologic switch "H" when prologic ,"L" when not prologic.
25~33	G1~G9	O	FL gird output.
34~40	S1~S7	O	FL Segment output.
41	VDD2	–	Connected to GND.
42	VP	–	Power FL display negative supply terminal.
43~63	S8~S28	O	FL Segment S8~S28 output.
64	NC	–	Not used.
65	$\overline{\text{LED ON}}$	O	MULTI JOG LED output.
66	$\overline{\text{LED ON}}$	O	MULTI JOG LED output.
67~69,72	NC	–	Not connected.
70	$\overline{\text{O-L FREQ ON}}$	O	Spectrum analyzer low frequency output.
71	$\overline{\text{O-H FREQ ON}}$	O	Spectrum analyzer high frequency output.
73	VSS2	–	GND.
74	SPEANA C	O	Spectrum analyzer band switch output C.
75	SPEANA B	O	Spectrum analyzer band switch output B.
76	SPEANA A	O	Spectrum analyzer band switch output A.
77	SEL	O	Spectrum analyzer band switch output select .
78~79	NC	–	Not connected.
80	I/O-$\overline{\text{SERIAL}}$	I/O	Input/output serial data for communication.

MECHANICAL EXPLODED VIEW 1 / 1 (GE-NH2000)



MECHANICAL PARTS LIST 1 / 1 (GE-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SU1-007-010		KNOB,RTRY JOG
2	8A-SU1-006-010		RING,JOG
3	8Z-SU1-005-010		REFLECTOR,JOG
4	8A-SU1-004-010		WINDOW,DISPLAY
5	87-CE3-023-010		BADGE,AIWA 30N SILV
6	8A-SU1-016-010		CABI,FR YS
7	8A-SU1-009-010		KEY,DEMO
8	8A-SU1-008-010		KEY,GEQ EZ
9	8A-SU1-010-010		KEY,ENTER
10	88-SU1-201-110		GUIDE,FL
11	8A-SX1-011-010		PANEL,SIDE L
12	8A-SU1-002-010		CABI,STEEL
13	8A-SX1-012-010		PANEL,SIDE R
14	8A-SU1-015-010		CABI,REAR YSM
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-B10-091-010		UTT2+3-10 BLK

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
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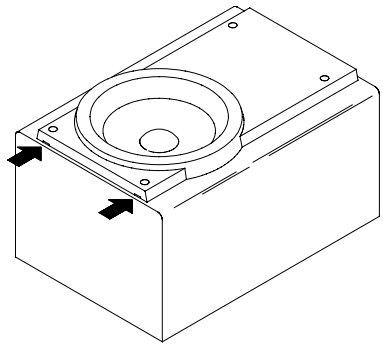
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

SPEAKER DISASSEMBLY INSTRUCTIONS

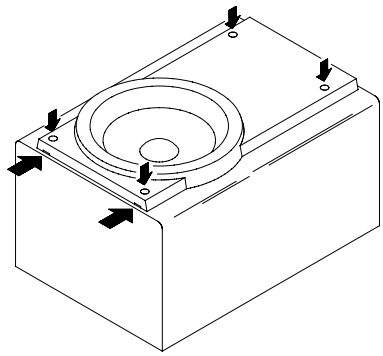
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



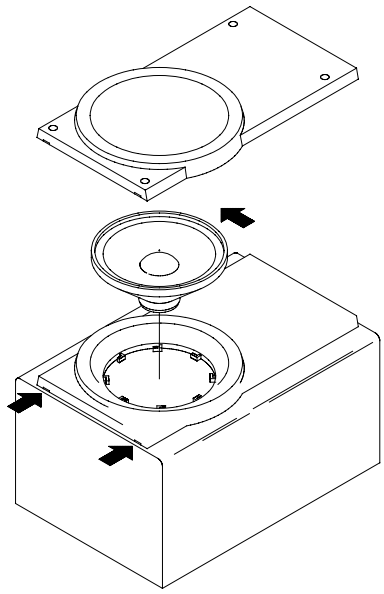
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

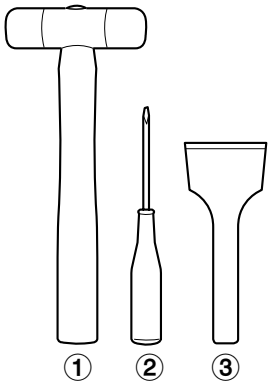


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

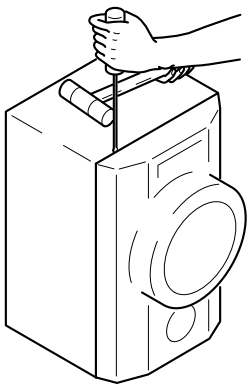


Fig-1

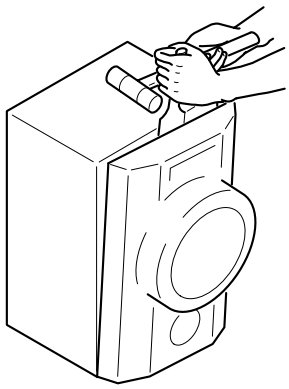


Fig-2

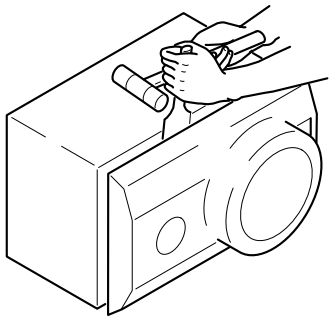


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST SX-NDPH2100

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NS5-610-010		CORD,SPKR
2	8A-SSM-005-010		PANEL,FR L
3	8A-SSM-001-010		PANEL,FR R
4	8A-SSM-004-010		PANEL,TW
5	8A-SSM-002-010		GRILLE,FRAME ASSY
6	8Z-SSM-009-010		PROTECTOR,TW
7	8A-SSM-602-010		SPKR,W 150
8	8Z-NSY-608-010		SPKR,CERAMIC ASSY
9	88-SSM-603-010		SPKR,TW 60

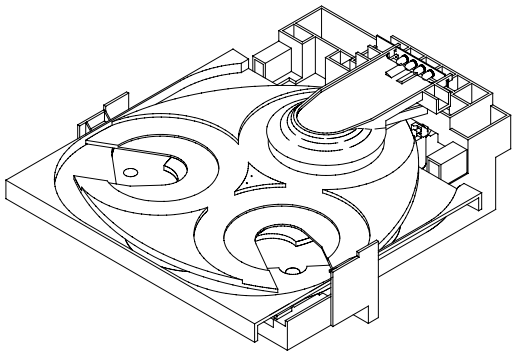
アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

9620450 0251431 Printed in Singapore

aiwa SERVICE

AZG-1

English



SERVICE MANUAL

CD-R/RW MECHANISM

BASIC CD MECHANISM:KSM-880CAB

TYPE
ZD8RD
YZD8RMDJM
ZD8RMDJM
ZD8RDNDM
YKZD8RDF
ZD8RDM
YZD8RDM
ZD8RN1DM
YZD8RDJM

aiwa

S/M Code No. 09-001-335-3N6

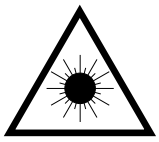
DATA

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

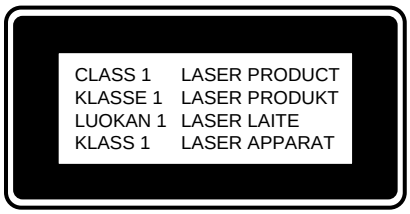
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

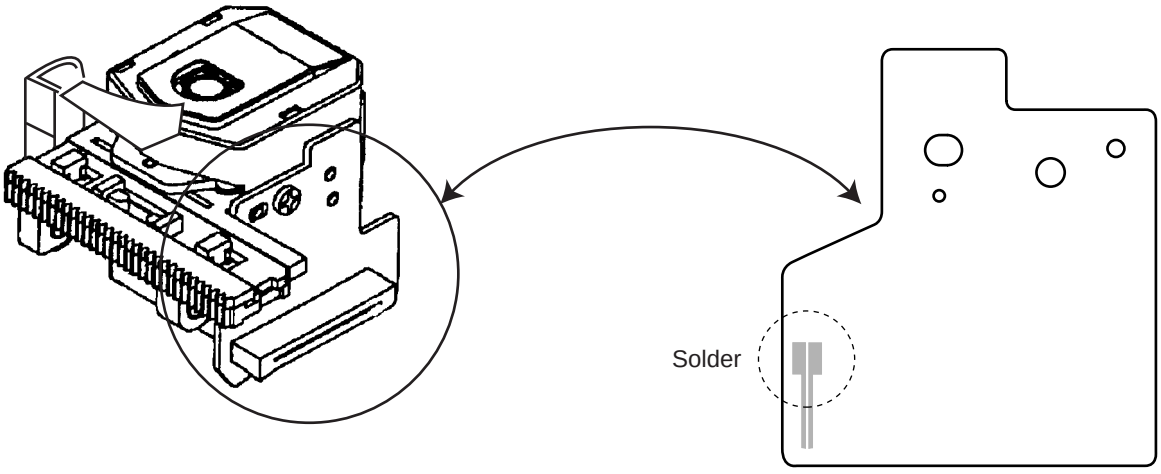
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

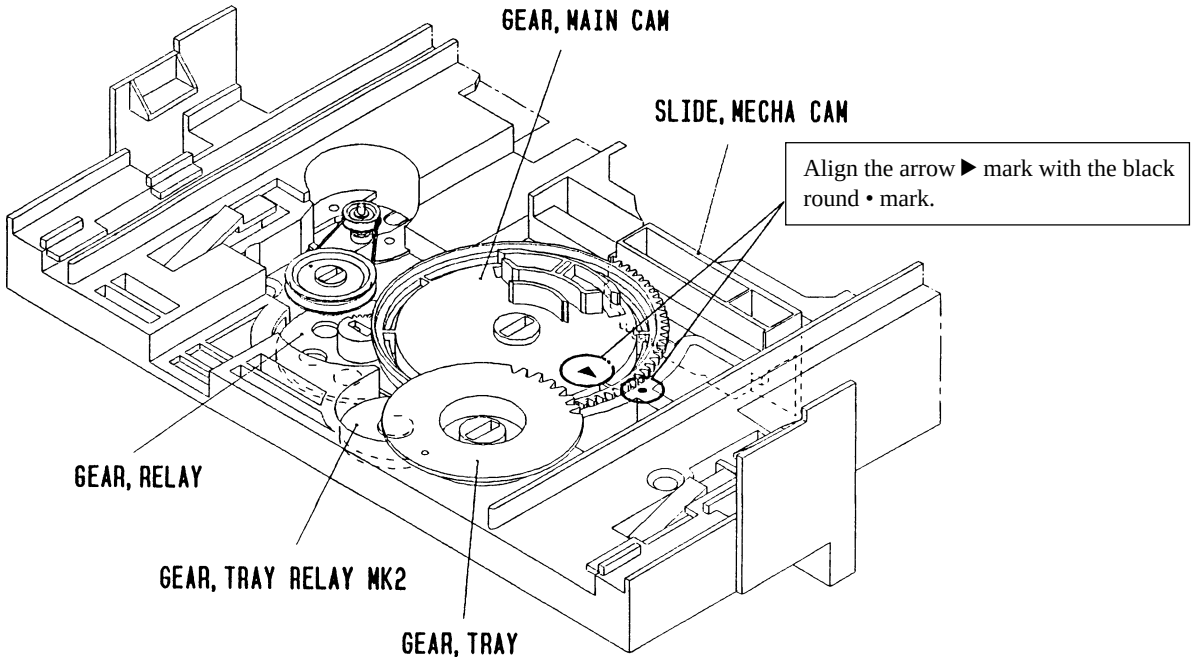
1) After the connection, remove solder shown in the figure below.



How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

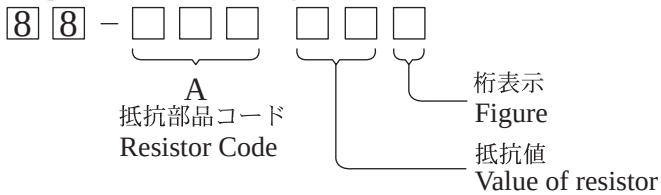
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-381-040		C-IC,LA9235M
	87-A21-556-010		C-IC,LC78641E
	87-A21-414-010		IC,BA5927S
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-497-080		TR,2SA1980Y/G
	87-A30-087-080		C-FET,2SK2158
	87-026-237-080		CHIP-TR,DTC124XK <EXCEPT ZD8RN1DM,YZD8RDM>
	87-A30-075-080		C-TR,2SA1235F
DIODE			
	87-A40-270-080		C-DIODE,MC2838
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-003-080		ZENER,MTZJ4.3A
	87-A40-337-080		ZENER,MTZJ6.8B
	87-A40-313-080		C-DIODE,MC2840
3CD C.B			
C1	87-010-374-080		CAP,E 47-10
C2	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C2	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C3	87-010-260-080		CAP, ELECT 47-25V
C4	87-010-260-080		CAP, ELECT 47-25V
C5	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C5	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C6	87-010-405-080		CAP, ELECT 10-50V
C7	87-010-263-080		CAP, ELECT 100-10V
C8	87-012-349-080		C-CAP,S 1000P-50 CH
C10	87-010-546-080		CAP,E 0.33-50
C11	87-010-401-080		CAP, ELECT 1-50V
C13	87-010-321-020		C-CAP,S 82P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C13	87-010-321-080		C-CAP,S 82P-50 J CH <YKZD88RDF,ZD8RD>
C15	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C15	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C16	87-010-260-080		CAP, ELECT 47-25V
C101	87-010-992-080		C-CAP,S 0.047-25 B
C102	87-010-401-080		CAP, ELECT 1-50V
C103	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C103	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C104	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C104	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C105	87-010-260-080		CAP, ELECT 47-25V
C106	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C106	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C107	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C107	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C108	87-010-186-080		CAP,CHIP 4700P<YKZD88RDF,ZD8RD>
C108	87-010-186-020		CAP,CHIP 4700P <EXCEPT YKZD88RDF,ZD8RD>
C109	87-010-992-080		C-CAP,S 0.047-25 B
C110	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C110	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C111	87-010-260-080		CAP, ELECT 47-25V
C112	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C112	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C114	87-010-260-080		CAP, ELECT 47-25V
C115	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C115	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C116	87-010-260-080		CAP, ELECT 47-25V
C117	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C117	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C118	87-010-260-080		CAP, ELECT 47-25V
C119	87-015-819-080		
C120	87-010-312-080		C-CAP,S 15P-50 CH <YKZD88RDF,ZD8RD>
C120	87-010-312-020		C-CAP,S 15P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C121	87-010-312-020		C-CAP,S 15P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C121	87-010-312-080		C-CAP,S 15P-50 CH <YKZD88RDF,ZD8RD>
C122	87-010-404-080		CAP, ELECT 4.7-50V
C123	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C123	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C124	87-010-401-080		CAP, ELECT 1-50V
C126	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C128	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C128	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C130	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C130	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C132	87-010-405-080		CAP, ELECT 10-50V
C133	87-010-314-020		C-CAP,S 22P-50V <EXCEPT YKZD88RDF,ZD8RD>
C133	87-010-314-080		C-CAP,S 22P-50V<YKZD88RDF,ZD8RD>
C135	87-A11-088-080		CAP,TC U 100P-50 J CH
C151	87-010-405-080		CAP, ELECT 10-50V
C152	87-010-405-080		CAP, ELECT 10-50V
C192	87-012-349-080		C-CAP,S 1000P-50 CH
C193	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C193	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C201	87-A10-730-080		CAP,E 1000-16 SMG
C202	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C202	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C204	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C204	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C205	87-010-405-080		CAP, ELECT 10-50V
C206	87-010-405-080		CAP, ELECT 10-50V
C207	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C207	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C301	87-010-382-080		CAP, ELECT 22-25V
C302	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C302	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C303	87-010-260-080		CAP, ELECT 47-25V
C401	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C401	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C402	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C402	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C403	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C403	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C404	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C404	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C405	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C405	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C406	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C406	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C407	87-010-405-080		CAP, ELECT 10-50V
C454	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C454	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C601	87-010-260-080		CAP, ELECT 47-25V
C602	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C602	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
CN1	87-A60-429-010		CONN,16P H TOC-A
CN201	84-ZG1-648-010		CONN ASSY,6P
CN202	87-A60-130-010		CONN,5P V
CN501	84-ZG1-647-010		CONN ASSY,2P <EXCEPT ZD8RN1DM,ZD8RNDM>
CN601	87-009-345-010		CONN,2P PH V <EXCEPT ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RNDM>
CON401	87-099-030-010		CONN,13P 6216H
FB601	87-008-372-080		FLTR,EMI BL01 RN1 <EXCEPT ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RNDM>
FB602	87-008-372-080		FLTR,EMI BL01 RN1
LED601	87-A40-558-010		LED,SLZ-8128A-01-A
M201	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
SW201	87-036-109-010		SW,MICRO SPPB61
SW202	87-036-109-010		SW,MICRO SPPB61
X101	87-A70-046-010		VIB,XTAL 16.934MHZ
LED. C.B			
LED501	87-A40-263-080		LED,SLH-56PCT31 GRN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED502	87-A40-263-080		LED,SLH-56PCT31 GRN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED503	87-A40-268-080		LED,SLH-56DCT31 ORN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED504	87-A40-268-080		LED,SLH-56DCT31 ORN <EXCEPT ZD8RN1DM,ZD8RNDM>
T-T C.B			
C401	87-018-214-080		CAP TC U 0.1-50F
CON401	86-NFZ-675-010		CONN,5P H 6216-11H
M401	87-045-364-010		MOTOR(BCH3B14)
PS401	87-026-573-010		SNSR,PHOTO GP1S53V
MOTOR C.B			
PIN3	91-564-722-110		CONN,PIN 6P
SW1	91-572-085-110		LEAF SWITCH

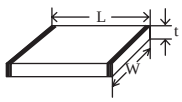
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

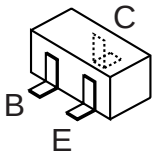
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

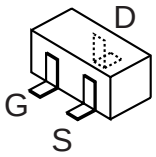
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

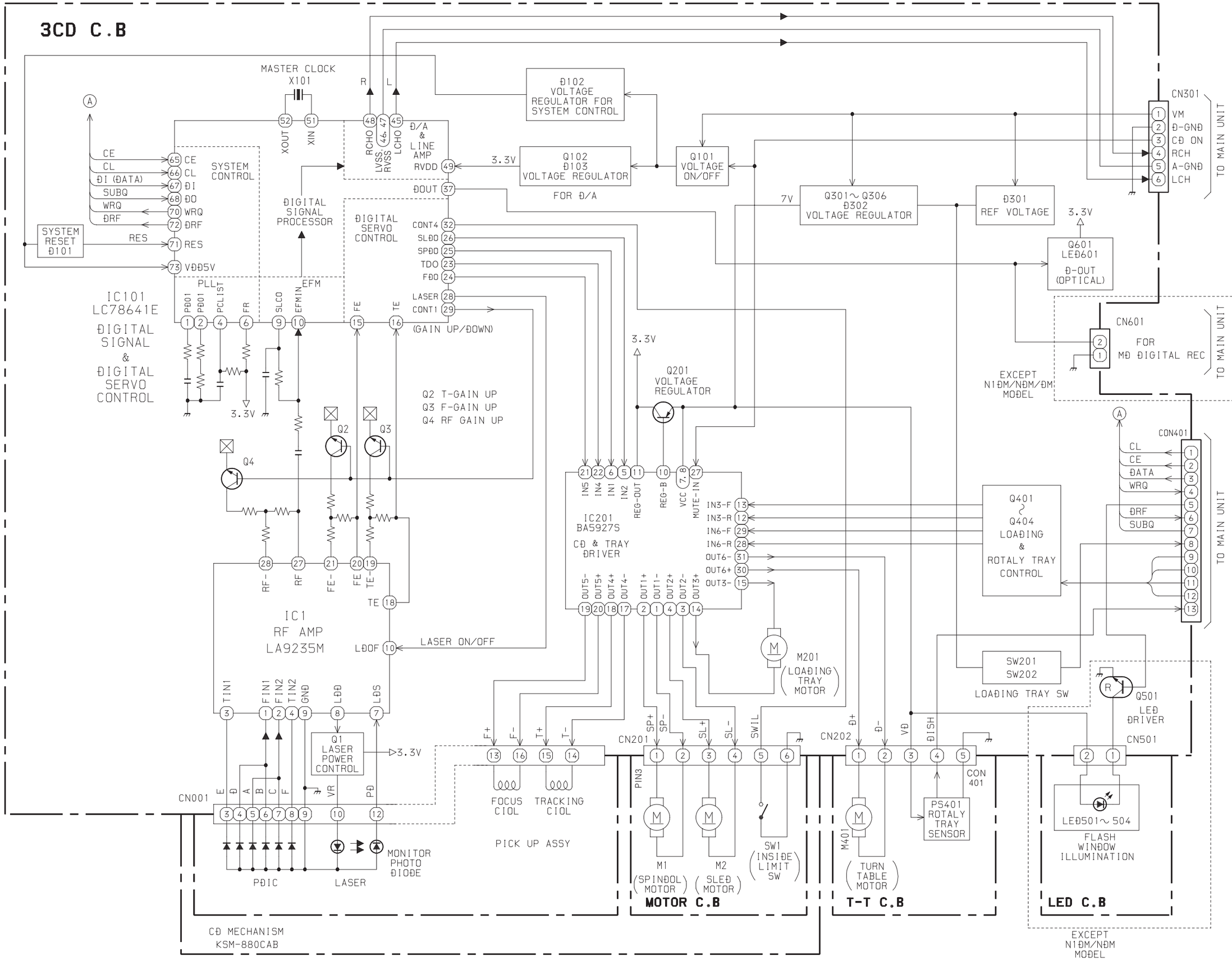


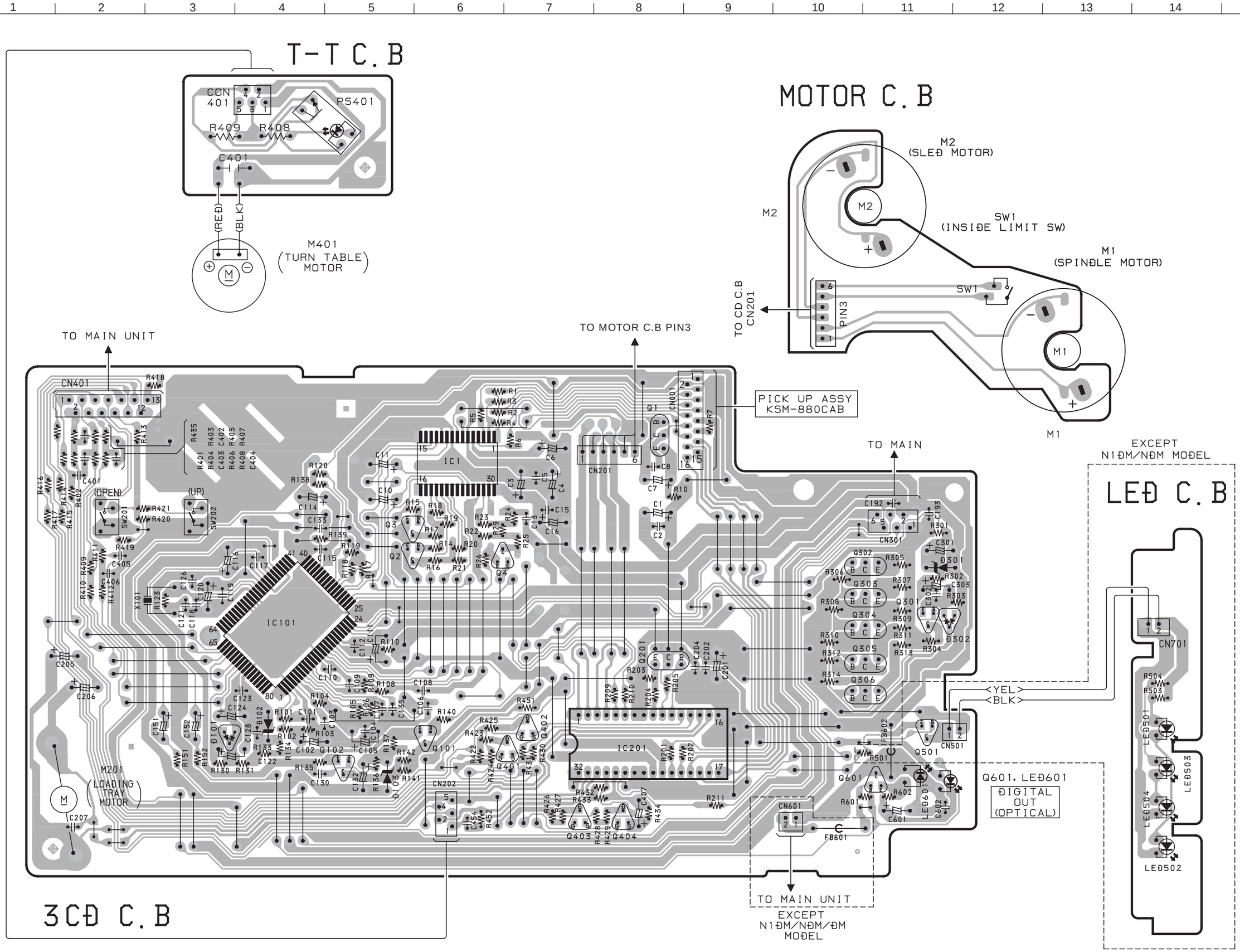
2SA1235F
2SC3052F
DTC124XK

2SA1980Y/G
KTA1266GR

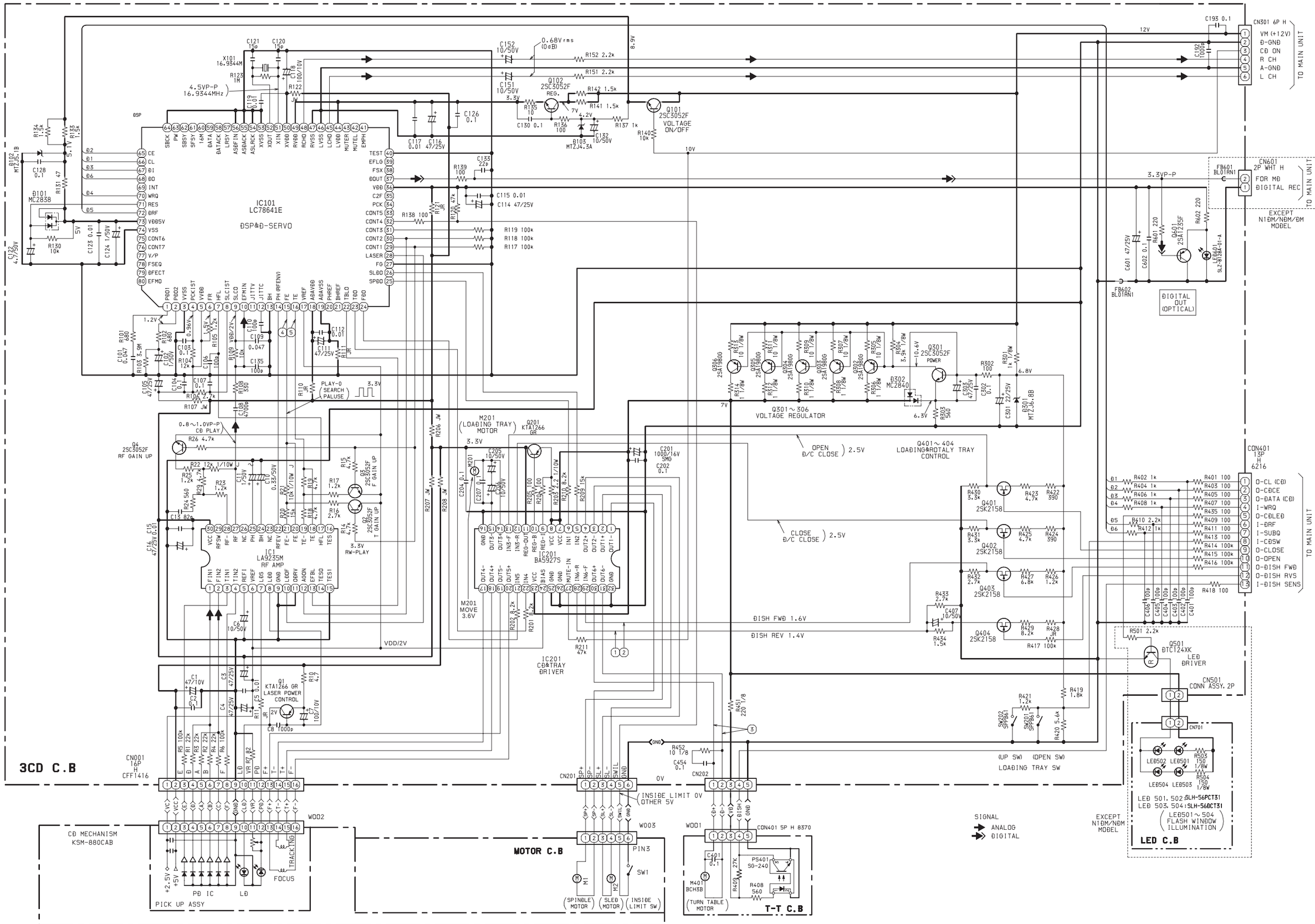


2SK2158


3CD C.B
MASTER CLOCK
X101
XOUT
XIN
R
L
RCHO
LVSS
RVSS
LCHO
Đ/A & LINE AMP
Đ102 VOLTAGE REGULATOR FOR SYSTEM CONTROL
Q102 Đ103 VOLTAGE REGULATOR
FOR Đ/A
Q101 VOLTAGE ON/OFF
3.3V
RVDD
ĐOUT
CE
CL
Đ I (ĐATA)
SUBQ
WRQ
ĐRF
RES
VĐĐ5V
SYSTEM CONTROL
SYSTEM RESET Đ101
ĐIGITAL SIGNAL PROCESSOR
ĐIGITAL SERVO CONTROL
CONT4
SLĐO
SPĐO
TDO
FĐO
LASER
CONT1
(GAIN UP/ĐOWN)
PLL
EFM
IC101
LC78641E
ĐIGITAL SIGNAL & ĐIGITAL SERVO CONTROL
PĐO1
PDO1
PCLIST
FR
SLCO
EFMIN
FE
TE
Q2 T-GAIN UP
Q3 F-GAIN UP
Q4 RF GAIN UP
Q2
Q3
Q4
Q201 VOLTAGE REGULATOR
7V
Q301~Q306 Đ302 VOLTAGE REGULATOR
Đ301 REF VOLTAGE
Q601 LEĐ601 Đ-OUT (OPTICAL)
CN301
VM
Đ-GNĐ
CĐ ON
RCH
A-GNĐ
LCH
TO MAIN UNIT
CN601
FOR MĐ ĐIGITAL REC
EXCEPT N1ĐM/NĐM/ĐM MOĐEL
CON401
CL
CE
ĐATA
WRQ
ĐRF
SUBQ
IC201
BA5927S
CĐ & TRAY ĐRIVER
IN5
IN4
IN1
IN2
REG-O
REG-B
VCC
MUTE-IN
IN3-F
IN3-R
IN6-F
IN6-R
OUT6-
OUT6+
OUT3-
OUT5-
OUT5+
OUT4+
OUT4-
OUT1+
OUT1-
OUT2+
OUT2-
OUT3+
Q401 ~ Q404 LOAĐING & ROTALY TRAY CONTROL
SW201 SW202
LOAĐING TRAY SW
M201 (LOAĐING TRAY MOTOR)
M
IC1
RF AMP
LA9235M
RF-
RF
FE-
FE
TE-
TE
LĐOF
LASER ON/OFF
TIN1
FIN1
FIN2
TIN2
GND
LĐĐ
LĐS
Q1 LASER POWER CONTROL
VR
PĐ
CN001
E
Đ
A
B
C
F
PĐIC
LASER
MONITOR PHOTO ĐIOĐE
F+
F-
T+
T-
FOCUS CIOL
TRACKING CIOL
PICK UP ASSY
CN201
SP+
SP-
SL+
SL-
SWIL
PIN3
M1 (SPINĐOL MOTOR)
M2 (SLEĐ MOTOR)
SW1 (INSIĐE LIMIT SW)
MOTOR C.B
CN202
Đ+
Đ-
VĐ
ĐISH
M401
TURN TABLE MOTOR
PS401 ROTALY TRAY SENSOR
CON 401
T-T C.B
Q501 LEĐ ĐRIVER
CN501
LEĐ501~504
FLASH WINĐOW ILLUMINATION
LED C.B
EXCEPT N1ĐM/NĐM MOĐEL
CĐ MECHANISM KSM-880CAB


T-T C.B
CON 401
PS401
R409
R408
C401
(RED)
(BLK)
M401
(TURN TABLE MOTOR)
MOTOR C.B
M2
(SLED MOTOR)
M2
SW1
(INSIDE LIMIT SW)
M1
(SPINDLE MOTOR)
SW1
PIN3
TO CD C.B
CN201
M1
TO MAIN UNIT
TO MOTOR C.B PIN3
PICK UP ASSY
KSM-880CAB
TO MAIN
EXCEPT
N1DM/NDM MODEL
LED C.B
CN401
R418
(OPEN)
(UP)
SW201
SW202
M201
(LOADING TRAY MOTOR)
IC1
IC101
IC201
CN201
CN001
CN202
CN601
CN301
CN501
CN701
Q1
Q2
Q3
Q4
Q101
Q102
Q201
Q301
Q302
Q303
Q304
Q305
Q306
Q401
Q402
Q403
Q404
Q501
Q601
FB601
FB602
X101
D101
D102
D301
D302
LED501
LED502
LED503
LED504
LED601
<YEL>
<BLK>
Q601, LED601
DIGITAL OUT (OPTICAL)
TO MAIN UNIT
EXCEPT
N1DM/NDM/DM
MODEL
3CD C.B

SCHEMATIC DIAGRAM



TEST MODE

1. How to Start the CD Test Mode

While pressing the CD function key, connect the AC power plug to wall outlet.
The test mode starts up and “CD TEST” appears on the display.

2. How to Exit the CD Test Mode

Press the POWER button or disconnect the AC power plug from wall outlet.
* When any function key other than PLAY is pressed during playback, the test mode is canceled.

3. Function and Use of the CD Test Mode

NO	MODE	How to enter the mode	Display	Operation	Check item
1	Start mode		All indicators turn on	• All FL all ndicators turn on	• FL check • Microprocessor check
2	Search mode	STOP button	CD	• LD turns on all the time • Focus search continuos operation *1 • Spindle motor continuos kick	• APC circuit check • Laser current measurement • Focus search waveform check • Focus error waveform check (Ignores DRF during search mode)
3	Play mode	PLAY button	Normal	• Normal playback • Focus search is continued if failed in TOC READ.	• Each servo circuit is checked • DRF check
4	Traverse mode	PAUSE button	Normal	• Tracking servo OFF/ON Repeats OFF/ON every time the PAUSE button is pressed	• Tracking balance check
5	Sled mode	FF button	CD TEST	• Moves PU to inner circumference *2 Kicks the lens to inner circumference at the same time	• Sled circuit check • Tracking circuit check • Mechanism operation check • PU check
		RWD button	CD TEST	• Moves PU to outer circumference *2 Kicks the lens to outer circumference at the same time	
6	Spindle mode	TAPE REC button	All indicators turn on	• Pressing the button once rotates the spindle motor in the normal direction (rough speed). Pressing the button again rotates it in the reverse direction. Pressing it again stops the motor	• Spindle circuit check • Spindle motor check
7	RF AGC mode	TUNER button	AGC ON/OFF	• Repeats ON/OFF every time the TUNER button is pressed	• PU good or defective check • RF AMP circuit check

*1 ..... When the focus search keeps running for 10 minutes or longer continuously, the driver IC heats up, and the protective circuit works so that the machine may stops operating.
In this case, turn off the main power, wait for a while and restart the machine.

*2 ..... Do not keep pressing the FF or RWD button while the pickup is located at the innermost or outermost circumference because the gear can be damaged as the sled motor keeps rotating.

4. Automatic Adjustment Result Display

The automatic adjustment values of the focus and the tracking can be displayed.

4-1. Automatic Adjustment Result Display of Focus Offset Cancel/Gain

1) Enter the start mode (all indicators turn on).
2) Press the TAPE button to display “F**” and set each of the adjustment item to either ON or OFF. (Refer to the following table.)
3) Press the PLAY button to play back the CD.
4) Press the CD button.
5) The automatic adjustment value “F** **” is displayed. (Refer to the following table.)
6) Upon completion of check, press the CD button twice to return to the play mode.

Adjustment item (ON = 1, OFF = 0)			Automatic adjustment value display (Asterisk * means hexadecimal display.)			
F	OFFSET	GAIN	F	OFFSET	—	GAIN
F	0	0	F	Not displayed	Not displayed	Not displayed
F	1	1	F	**	Not displayed	**
F	1	0	F	**	Not displayed	Not displayed
F	0	1	F	Not displayed	Not displayed	**

4-2. Automatic Adjustment Result Display of Tracking Offset Cancel/Balance/Gain

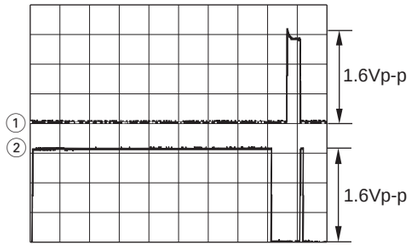
1) Enter the start mode (all indicators turn on).
2) Press the AUX button to display “T***” and set each adjustment item to either ON or OFF. (Refer to the following table.)
3) Press the PLAY button to play back the CD.
4) Press the CD button twice.
5) The automatic adjustment value “F******” is displayed. (Refer to the following table.)
6) Upon completion of check, press the CD button to return to the play mode.

Adjustment item (ON = 1, OFF = 0)				Automatic adjustment value display (Asterisk * means hexadecimal display.)			
T	OFFSET	BALANCE	GAIN	T	OFFSET	BALANCE	GAIN
T	0	0	0	T	Not displayed	Not displayed	Not displayed
T	1	1	1	T	**	**	**
T	1	1	0	T	**	**	Not displayed
T	1	0	1	T	**	Not displayed	**
T	1	0	0	T	**	Not displayed	Not displayed
T	0	1	1	T	Not displayed	**	**
T	0	1	0	T	Not displayed	**	Not displayed
T	0	0	1	T	Not displayed	Not displayed	**

WAVE FORM

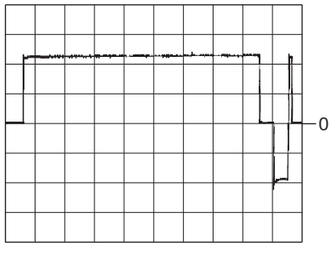
① IC201 ㉘ (IN6-R)
② IC201 ㉙ (IN6-F)

VOLT/DIV: 500mV
TIME/DIV: 200mS



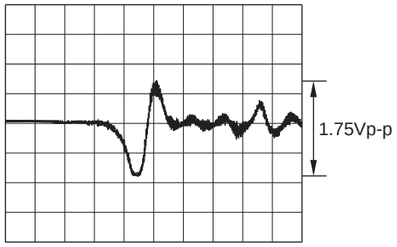
③ Between CN202 ① and ②
(② Pin: 0 Level)

VOLT/DIV: 1V
TIME/DIV: 200mS



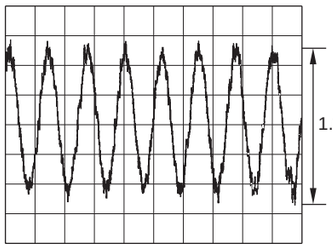
④ IC101 ⑮ (FE)

VOLT/DIV: 500mV
TIME/DIV: 2mS



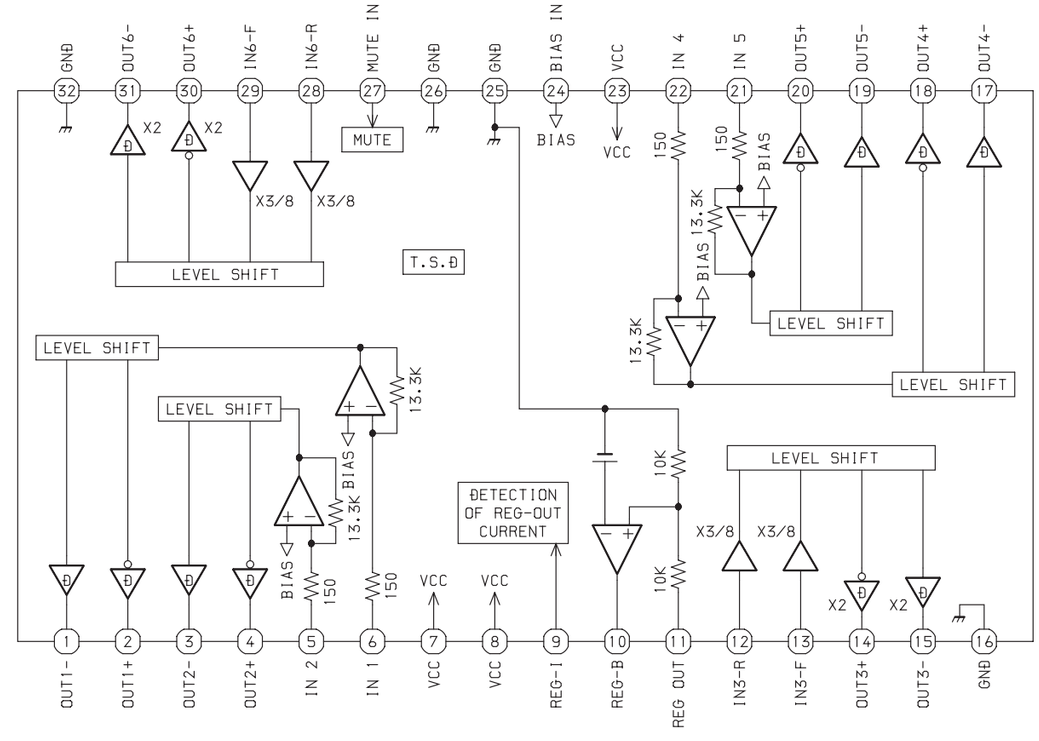
⑤ IC101 ⑯ (TE)

VOLT/DIV: 200mV
TIME/DIV: 200µS

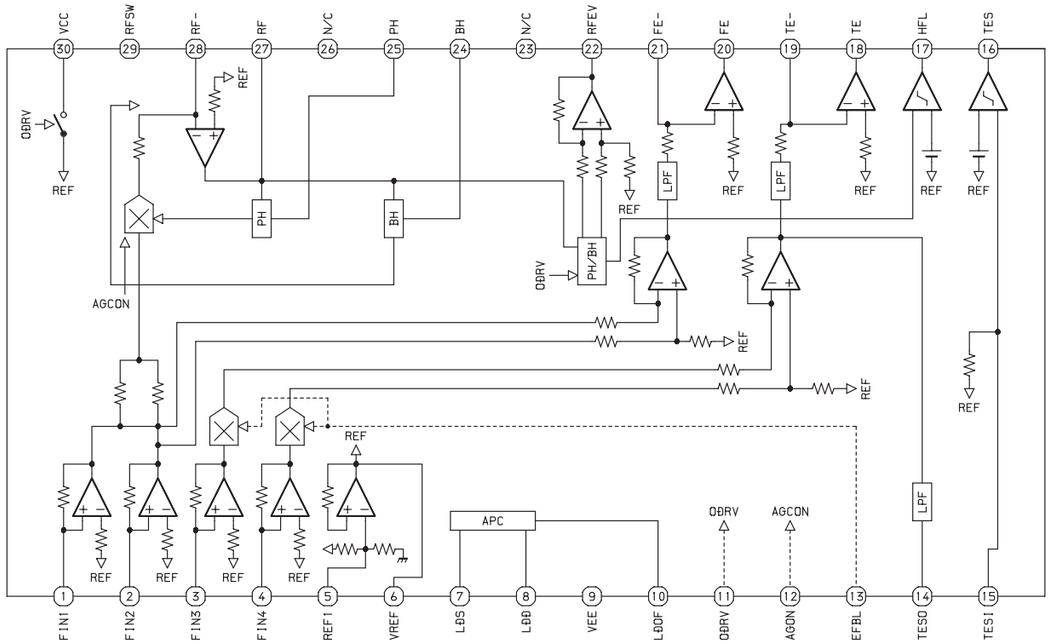


IC BLOCK DIAGRAM

IC, BA5927S



IC, LA9235M



IC DESCRIPTION

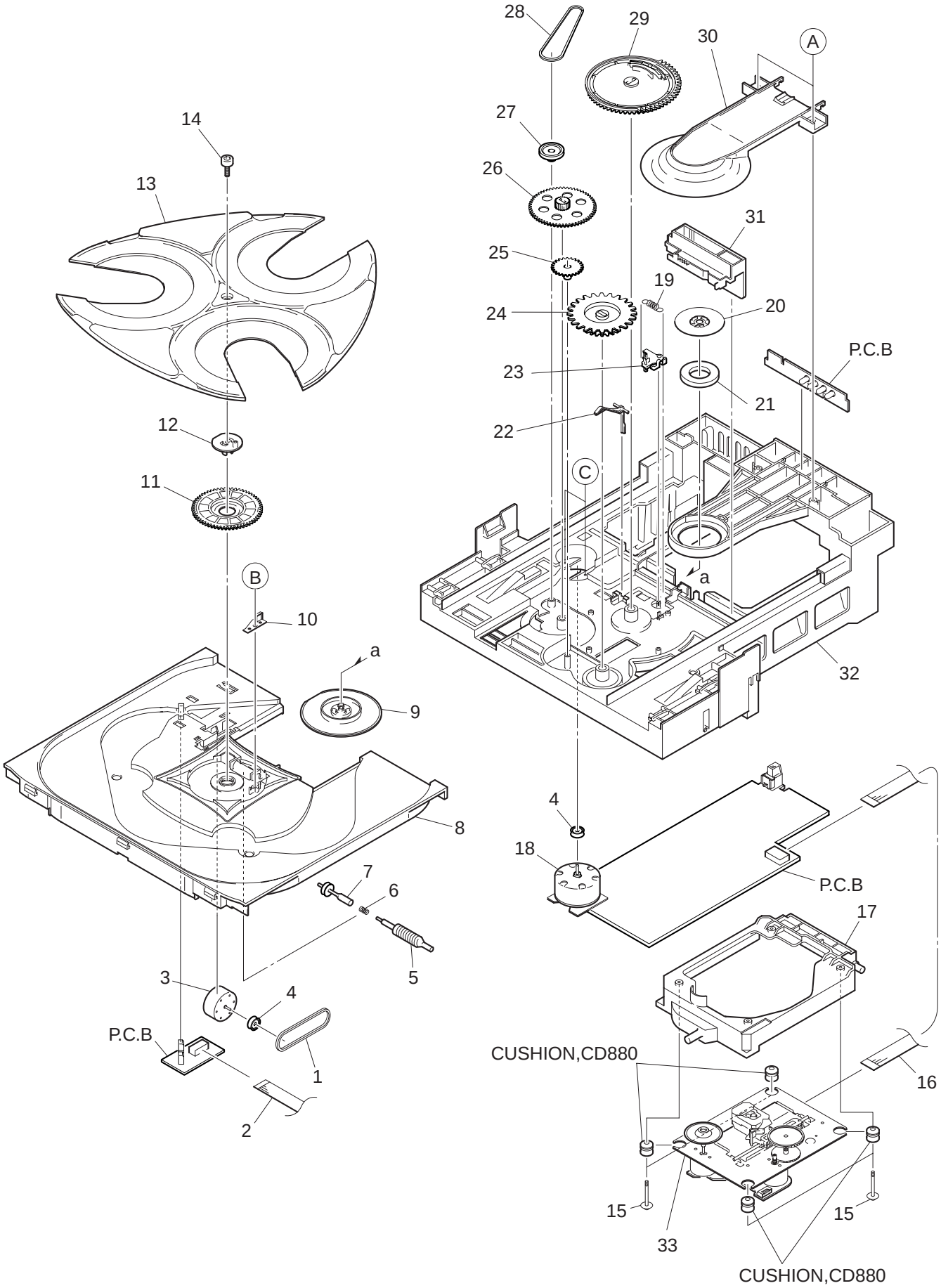
IC, LC78641E

Pin No.	Pin Name	I/O	Description
1	PDO1	O	Internal VCO control phase comparator output pin. (Pull down)
2	PDO2	O	Internal VCO control phase comparator output pin. OFF for rough servo, ON for phase servo. (Pull down)
3	VVSS	—	Internal VCO ground pin.
4	PCKIST	—	PDO output current adjustment resistor connection pin.
5	VVDD	—	Internal VCO power supply pin.
6	FR	—	VCO frequency range adjustment resistor connection pin. (Pull up)
7	HFL	I	Mirror detection signal input pin.
8	SLCIST	—	SLCO output current adjustment resistor connection pin.
9	SLCO	O	Control output.
10	EFMIN	I	EFM signal input pin.
11	JITTV	O	Jitter detection monitor pin.
12	JITTC	O	Jitter detection adjustment pin. (Pull down)
13	BH	I	BH signal input pin. (Connected to GND)
14	PH (RFENV)	I	PH signal or RFENV signal input pin.
15	FE	I	FE signal input pin.
16	TE	I	TE signal input pin.
17	VREF	I	VREF input pin.
18	ADAVDD	—	Servo A/D, D/A power supply pin.
19	ADAVSS	—	Servo A/D, D/A ground pin.
20	PHREF	O	PH reference output pin. (Not connected)
21	BHREF	O	BH reference output pin. (Not connected)
22	TBLO	O	Tracking balance output pin.
23	TDO	O	Tracking control output pin.
24	FDO	O	Focus control output pin.
25	SPDO	O	Spindle control output pin.
26	SLDO	O	Thread control output pin.
27	DVREF/FG	I/O	Output driver VREF output pin. FG signal input pin. (Connected to GND)
28	LASER	O	Laser ON/OFF control pin.
29	CONT1	I/O	General-purpose input/output pin 1. (Connected to GND)
30	CONT2	I/O	General-purpose input/output pin 2. (Connected to GND)
31	CONT3	I/O	General-purpose input/output pin 3. (Connected to GND)
32	CONT4	I/O	General-purpose input/output pin 4.
33	CONT5	I/O	General-purpose input/output pin 5. (Not connected)
34	PCK	O	EFM data playback clock monitor pin. Average 4.3218MHz when the phase is locked. (Not connected)
35	C2F	O	C2 flag output pin. (Not connected)
36	VDD	—	Digital power supply pin.
37	DOUT	O	Digital out output pin. (EIAJ format)
38	FSX	O	Output pin for the 7.35kHz synchronization signal divided from the crystal oscillator. (Not connected)

Pin No.	Pin Name	I/O	Description
39	EFLG	O	C1, C2 error correction monitor pin. (Not connected)
40	TEST	I	Test input pin. (Connected to GND)
41	EMPH	I/O	Emphasis pin. Which becomes an input pin after reset and can be controlled externally. This becomes an emphasis monitor pin under control by command. (Not connected)
42	MUTEL	O	L channel mute output pin. (Not connected)
43	MUTER	O	R channel mute output pin. (Not connected)
44	LVDD	—	L channel power supply pin.
45	LCHO	O	L channel output pin.
46	LVSS	—	L channel ground pin.
47	RVSS	—	R channel ground pin.
48	RCHO	O	R channel output pin.
49	RVDD	—	R channel power supply pin.
50	XVDD	—	Crystal oscillator power supply pin.
51	XIN	I	Connections for a 16.9344MHz crystal oscillator pin.
52	XOUT	O	
53	XVSS	—	Crystal oscillator ground pin.
54	ASLRCK	I	L/R clock input pin. (Connected to GND)
55	ASDACK	I	Bit clock input pin. (Connected to GND)
56	ASDFIN	I	L/R channel data input pin. (Connected to GND)
57	LRSY	O	L/R clock output pin. (Not connected)
58	DATACK	O	Bit clock output pin. (Not connected)
59	DATA	O	L/R channel data output pin. (Not connected)
60	16M	O	16.9344MHz output pin. (Not connected)
61	SFSY	O	Subcode frame synchronization signal output pin. This signal falls when the subcode is in the standby state. (Not connected)
62	SBSY	O	Subcode clock synchronization signal output pin. (Not connected)
63	PW	O	Subcode P, Q, R, S, T, U and W output pin. (Not connected)
64	SBCK	I	Subcode readout clock input pin. (Connected to GND)
65	CE	I	Chip enable signal input pin.
66	CL	I	Data transfer clock input pin.
67	DI	I	Data input pin.
68	DO	O	Data output pin.
69	INT	O	Interruption signal output pin. (Not connected)
70	WRQ	O	Interruption signal output pin.
71	RES	I	Reset input pin. This pin must be set low briefly after power is first applied.
72	DRF	O	Focus ON detect pin.
73	VDD5V	—	Microprocessor interface power supply.
74	VSS	—	Digital ground pin.
75	CONT6	I/O	General-purpose input/output pin 6.
76	CONT7	I/O	General-purpose input/output pin 7.
77	V/P	O	Rough servo/phase control automatic switching monitor output pin. “H” for rough servo and “L” for phase servo. (Not connected)

Pin No.	Pin Name	I/O	Description
78	FSEQ	O	Synchronization signal detection output pin. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not connected)
79	DEFECT	I/O	Defect pin. Which becomes an input pin after reset and can be controlled externally. This becomes the defect monitor pin under control by command. (Not connected)
80	EFMO	O	EFM signal output pin. (Not connected)

MECHANICAL EXPLODED VIEW 1/1



MECHANICAL PARTS LIST 1/1

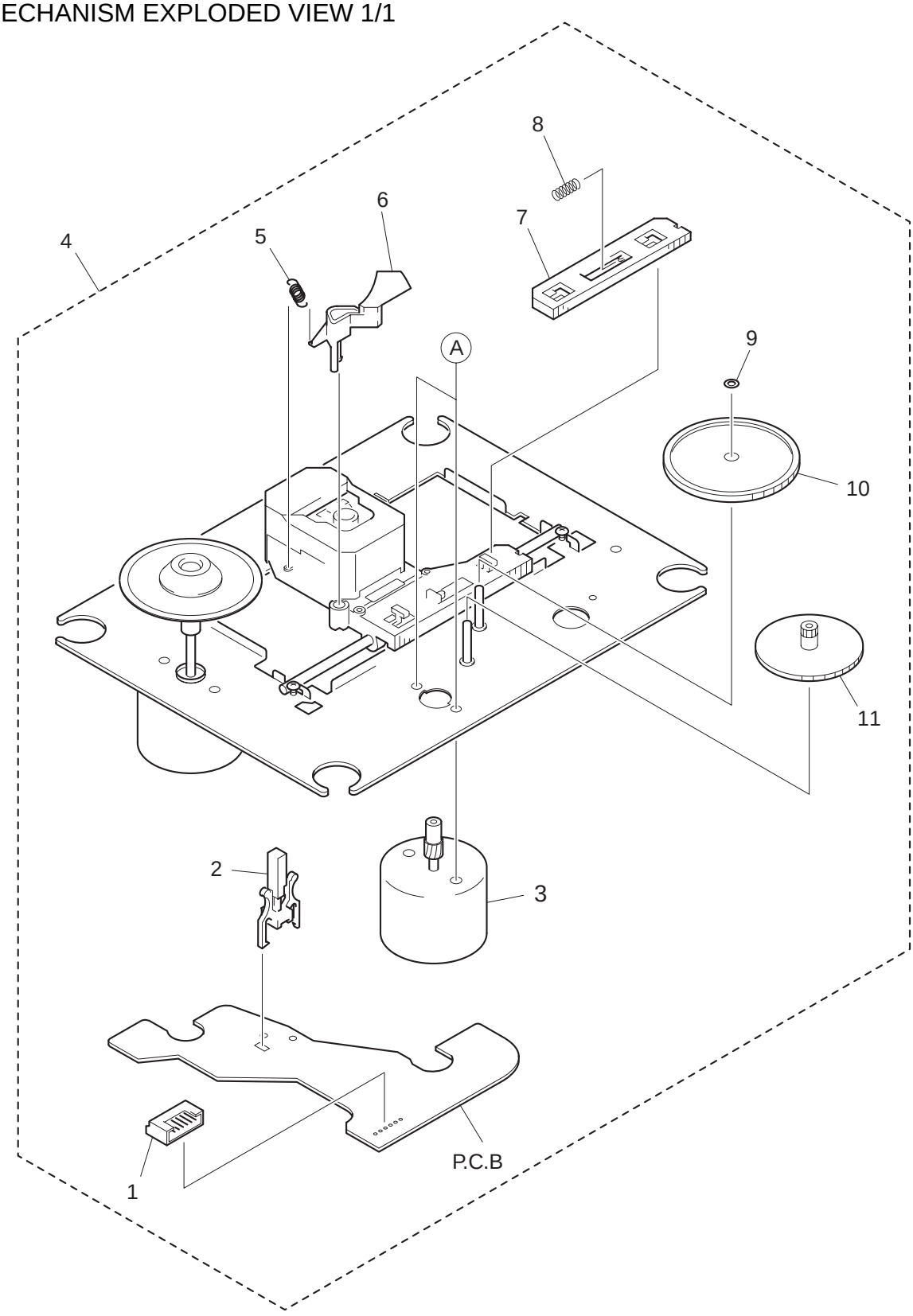
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-225-010		BELT,SQ1.0-63.3
2	84-ZG1-673-010		F-CABLE,5P 1.25 210MM BLACK N <EXCEPT ZD8RN1DM,ZD8RNDM>
2	84-ZG1-672-010		F-CABLE,5P 1.25 210MM WHITE N <ZD8RN1DM,ZD8RNDM>
3	87-045-364-010		MOTOR(BCH3B14)
4	84-ZG1-267-010		PULLEY,LOAD MO 8 <EXCEPT YKZD8RDF,ZD8RD>
4	81-ZG1-212-010		PULLY,LOAD MO<YKZD8RDF,ZD8RD>
5	84-ZG1-238-010		GEAR,WORM N
6	84-ZG1-248-010		SPR-C,WORM
7	84-ZG1-239-210		PULLY,WORM N
8	84-ZG1-008-210		TRAY,NO3<ZD8RD>
8	8A-ZG1-001-010		TRAY,NO3 BLU<EXCEPT ZD8RD>
9	8A-ZG1-210-010		HLDR,MAGNET 23<YKZD8RDF>
9	84-ZG1-243-210		HLDR,MAGNET N(J) <YZD8RDJM,ZD8RMDJM,YZD8RMDJM>
9	84-ZG1-289-010		HLDR,MAGNET NAT<ZD8RNDM>
9	81-ZG1-277-310		HLDR,MAGNET N <ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RD>
10	84-ZG1-259-010		SPR-P,WORM
11	84-ZG1-221-010		GEAR,MAIN TT<YKZD8RDF>
11	84-ZG1-269-010		GEAR,MAIN TT 4<EXCEPT YKZD8RDF>
12	84-ZG1-224-010		LEVER,TT<EXCEPT ZD8RNDM>
12	84-ZG1-288-010		LEVER,TT NAT<ZD8RNDM>
13	8A-ZG1-002-010		TURN TABLE,NO1 BLU<EXCEPT ZD8RD>
13	84-ZG1-005-210		TURNTABLE,NO1(*)<ZD8RD>
14	81-ZG1-239-010		S-SCREW,TT
15	8A-ZG1-201-010		S-SCREW,MECH 880
16	85-NFT-611-110		FF-CABLE 16P-1.0
17	84-ZG1-299-210		HLDR,MECHA NO3<EXCEPT ZD8RNDM>
17	8A-ZG1-203-010		HLDR,MECHA NO3 NAT<ZD8RNDM>
18	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
19	84-ZG1-211-010		SPR-E CAM S
20	84-ZG1-285-010		PLATE,MAGNET BLK<ZD8RN1DM>
20	81-ZG1-255-110		PLATE,MAGNET MK2<EXCEPT ZD8RN1DM>
21	83-ZG3-604-010		RING,MAG 2
22	83-ZG3-213-010		LVR,SW
23	84-ZG1-208-210		LEVER,CAM<YKZD8RDF>
23	84-ZG1-266-010		LEVER,CAN 8<EXCEPT YKZD8RDF>
24	84-ZG1-205-210		GEAR,TRAY (*)
25	81-ZG1-291-110		GEAR,TRAY RELAY NO3
26	84-ZG1-206-110		GEAR,RELAY<YKZD8RDF>
26	84-ZG1-274-010		GEAR,RELAY 8<EXCEPT YKZD8RDF>
27	84-ZG1-207-010		PULLEY,RELAY
28	84-ZG1-209-010		BELT,SQ1.8-117.7
29	84-ZG1-203-410		GEAR,MAIN CAM<ZD8RNDM>
29	84-ZG1-215-410		GEAR,MAIN CAM BLU<EXCEPT ZD8RNDM>
30	84-ZG1-011-010		REFLECTOR,CD <EXCEPT ZD8RN1DM,ZD8RNDM>
31	84-ZG1-216-310		SLIDE,MECHA CAM YEL <EXCEPT ZD8RNDM>
31	84-ZG1-204-310		SLIDER,MECHA CAM<ZD8RNDM>
32	84-ZG1-286-010		CHAS,MECHA NAT<ZD8RNDM>
32	84-ZG1-201-410		CHAS,MECHA<EXCEPT ZD8RNDM>
33	M8-ZZK-C90-070		KSM-880CAB
A	87-067-703-010		TAPPING SCREW, BVT2+3-10 <EXCEPT ZD8RN1DM,ZD8RNDM>
B	87-067-981-010		BVT2+3-6 BLK
C	87-251-070-410		U+2.6-3

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	91-564-722-110		CONN,PIN 6P
2	91-572-085-110		LEAF SWITCH
3	9X-264-655-010		SL MOTORR ASSY
4	M8-ZZK-C90-070		KSM-880CAB
5	92-647-416-020		SPRING EXTENSION
6	92-647-595-020		SHUTTER B
7	92-647-732-010		NS SLIDE RACK
8	92-647-742-010		SPRING COMPRESSION
9	93-321-813-110		POLI WASHER
10	92-647-407-010		GEAR A
11	92-647-408-020		GEAR B
A	93-713-786-510		SCREW,+P2-3

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

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